

Bill 25 (2019)
Early Testimony

Speaker Registration/Testimony

Name William Metzger
Phone 8089886220
Email wjmetzger@hotmail.com
Meeting Date 07-25-2019
Council/PH Committee Zoning
Agenda Item Bill 25
Your position on the matter Support
Representing Self
Organization

Do you wish to speak at the hearing? Yes

Written Testimony My condo in Makiki has no solar and no EV hookup. I want both including Level 2 for charging my car.
We MUST move faster to reduce our CO2 emissions.
PLEASE pass this important Bill 25.

Testimony Attachment

Accept Terms and Agreement 1

David Atcheson
1212 Nuuanu Ave Apt. 906
Honolulu, HI 96817
atchesond@gmail.com

July 19, 2019

Honolulu City Council

via <http://www.honolulu.gov/ccl-testimony-form.html>

RE: Bill 25 – Relating to the Adoption of the State Energy Conservation Code
Support, with amendments

Dear Councilmembers,

I support transitioning to 100% renewable energy systems as rapidly as possible to reduce emissions of greenhouse gasses. We must act quickly to increase the odds of avoiding climate chaos. Bill 25's provisions requiring that new residential water heating must be solar or wind powered and specifying requirements for EV charger-ready outlets are positive and encouraging steps -- but I would like to urge important amendments.

I live in a condo building. As I look ahead to replacing my 2003 car, my first choice would be an electric vehicle. A significant hurdle is the fact that there is no outlet available near my parking stall for charging. Putting myself in the shoes of a future renter or buyer of a unit in a new multi-family dwelling, I do feel it's important that stalls be prepared for EV charging and am glad to see that in the bill. (Though If we electrify our transportation sector as rapidly as I feel the climate science demands, the 25%-of-stalls requirement may be too low.)

But my main comment is about the type of charging infrastructure required. I fear that requiring regular 120v outlets in new residential buildings is insufficient -- "filling up" would simply take too long, sometimes up to 2 days or more. Charging for a few hours between work, errands, and outings is just not going to provide the kind of range, confidence, and peace of mind that people will likely need to

embrace an EV future. I feel the outlets should be 220v (ready for Level 2 charging) and encourage you to amend the bill accordingly. This can save the unnecessary expense and hassle of outlet upgrades later.

Another possibility I envision (though I am not suggesting it as an amendment to this bill), is car sharing for residential buildings. This could reduce the number of parking stalls needed and help a subset of residents go otherwise car-free. In this scenario of frequently-used, electric car share vehicles, it is all the more important that the charging stations be Level 2.

Thank you for preparing and passing legislation that accelerates the transition to a clean energy future. And thank you for taking my comments into consideration.

Sincerely,

David Atcheson

Speaker Registration/Testimony

Name Thomas DiGrazia
 Phone 8082620770
 Email digraziat001@gmail.com
 Meeting Date 07-25-2019
 Council/PH Committee Zoning
 Agenda Item 7
 Your position on the matter Support
 Representing Self
 Organization
 Do you wish to speak at the hearing? Yes

Dear ZPH Chair Menor and Committee Members,

In recent years, many bills in the state legislature have attempted to expand the infrastructure required for wider adoption of electric vehicles (EVs). Nearly all have failed.

Similarly, bills to enforce the 2010 law requiring solar water heating on every new Hawaii home have failed.

Both of these efforts are crucial pieces in our struggle to make the State zero-emission as soon as possible, and do our part to fight climate change, by far the most urgent issue of our time. The bill before you would codify very modest advances in these two areas, as a small step toward fighting the climate crisis.

Written
Testimony

I ask you to change all the bill's language about Level 1 charging to be Level 2 charging. I understand that Level 2 is fast becoming the standard nationwide, because it is several times faster, making EVs far more convenient and practical for homeowners and renters in a wide variety of situations. "Range anxiety" should not prevent people from switching to an EV, which nearly everyone in Hawaii must eventually do, if we are to meet the clean energy goals we are rightly so proud of.

Bolder steps, such as requiring PV on all new buildings and more widespread Level 2 EV charging readiness, should be our goal. But this bill is an important step. AC Level 1 or 2 charger readiness for 25% of new parking stalls, and 90% zero-emission energy water heating on residential buildings, are minimal requirements that should be supported by anyone with the least concern about the climate crisis, or about saving consumers money.

Please actively support Bill 25 and take a step toward a more livable Earth.

Thank you for the opportunity to testify.

Tom & Family

Testimony

Attachment

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and Agreement 1

From: CLK Council Info
Sent: Tuesday, July 23, 2019 7:15 AM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Thomas DiGrazia
Phone 808-262-0770
Email digraziat001@gmail.com
Meeting Date 07-25-2019
Council/PH Committee Zoning
Agenda Item ADOPTION OF STATE ENERGY CONSERVATION CODE
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? Yes

Aloha Chair Menor, Vice Chair Waters, and members of the Committee,

I am testifying in strong support of Bill 25, "Relating to the Adoption of the State Energy Conservation Code."

Written
Testimony

This is a critical clean energy and climate measure that would modernize the City & County of Honolulu's building energy code. This modernization updates Honolulu's existing building energy code—which is over thirteen years out of date—to increase occupant health and comfort while significantly reducing energy use for new homes and buildings. The proposed code revision reflects broad changes in technology, building materials, and best practices, while considering Honolulu's unique island and building environment.

In addition, this measure would ensure that new homes come equipped with either solar or high-efficiency water heaters, helping to close the loophole that has allowed thousands of gas water heaters to be installed in recent housing.

Finally, Bill 25 helps Honolulu make the transition to zero emission vehicles by requiring that a certain percentage of new parking stalls be "EV-ready" (with wiring and capacity for EV chargers to be installed in the future). This will help to make electric vehicles more accessible to residents and reduce the overall cost of our transition to clean transportation. This provision should be strengthened, however, by requiring Level 2 charging capacity in all new parking stalls (for commercial and multi-family buildings), as Vancouver and other cities have done. This will help to "future-proof" new construction and accelerate our clean

transportation future.

Mahalo for considering my testimony.

Testimony

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To: The Zoning, Planning and Housing Committee

From: Karen Margulies Kimbrell

Date: July 17, 2019

In strong support of BILL0XX(19)

Dear Chair Menor and Committee Members,

I own my home and replaced the electric water heater with solar many years ago. 12 years ago I added solar panels to the house. I've been enjoying the savings for many years, and have felt a personal satisfaction in knowing I'm assisting with the climate change crisis.

I drive a Prius hybrid & have installed Level 1 charging in my carport. When my Prius finally gives out, I plan to buy a fully electric car and install Level 2 charging. This won't be terribly expensive in my single home, but it costs over \$10,000 in an existing parking stall for condos and townhouses. I pity people who want an EV but would be saddled with that additional expense. Installing during construction brings that cost down to \$920, on average.

An abundance of Level 2 EV charging should be installed in every new building, residential or commercial. I want Level 2 at home because I cross the Pali highway every day and my workplace does not provide charging. In the meantime, this bill would at least offer some level of charging for the many people about to buy electric cars. Electric car choices have increased and the cost has decreased, so more people will be choosing this option now.

I also support the requirement in this bill for 90% renewable energy to heat water. Hawaii has sunshine and wind. It makes no sense, economically or ecologically, to use gas or electricity for this. Liquefied Natural Gas is actually methane, a greenhouse gas 84 times as harmful as carbon dioxide.

Date: July 25, 2019

To: Councilmember Ron Menor, Chair
Members of the Zoning, Planning and Housing Committee

From: Christine Trecker

RE: Bill 25: Relating to the Adoption of the State Energy Conservation Code

I firmly support Bill 25 to help bolster clean, efficient energy use in Honolulu's residential and commercial buildings.

However, with respect to the provision in the bill requiring the installation of electric vehicle charging units in residential buildings, I strongly urge the committee to change the language to require Level 2 charging units (vs Level 1). Level 1 falls seriously short in charging speed, making it impractical for drivers and a deterrent to EV vehicle use (Subsection C406.8, on pages 7-8).

I am on the Board of Directors for a Honolulu condo with over 400 units. Unfortunately, when our condo was built EV charging outlets were not required. Since then an increasing number of our residents have or want to buy electric vehicles. Sadly, retrofitting our 40-story building to meet the growing EV demand will be a major and costly undertaking.

Let's build smart! Please pass Bill 25 with the amended language requiring the installation of level 2 EV-ready outlets in new multi-unit residential construction.

I applaud the City Council for addressing climate change realities via hugely important bills such as this one.

Christine Trecker

Bill 25 (2019) is attached, but it's long and dense.

There's one change I ask you to make from last time. The bill requires wiring for Level 1 EV chargers, like in your hallway. Please urge the committee to amend this to be wiring for Level 2 EV chargers, like for your dryer. See below for talking points on this.

Bill 25 did pass First Reading on July 3, and was referred to the Zoning, Planning, and Housing Committee (Chair Ron Menor). Their next meeting is scheduled for Thursday, July 25 at 9:00am. **That's (very likely) when we need bodies and your eloquent, heartfelt oration.**

Please urge the committee to amend Level 1 EV charging language to be Level 2. Details are in Subsection C406.8, on pages 7-8.

* Level 1 charging is pitifully insufficient for many drivers who use their EVs daily for any substantial commute, because it provides only about four miles of driving range per hour of charging. A Level 1 charger may only let you drive about 50 miles, and that's if you charge it as soon as you get home, and go nowhere in the evening. Fully charging a Nissan Leaf with a Level 1 charger, for example, takes 1.7 to 2.6 days! A Chevy Bolt takes 2.5 days; a Tesla Model 3, 2.5 to 3.1 days.

* Slow Level 1 charging is discouraging people from buying EVs. Fifty-eight percent of consumers have avoided buying an EV out of fear they'll lose power before being able to charge [1]. It's by far the largest reason keeping them from buying an EV.

And 51% of EV drivers charge their cars at home; only 16% charge at work. If most people charge at home and they're afraid that won't get them safely through their day, they're not going to buy an EV. This "range anxiety" is one of the major barriers to large scale adoption of EVs [2][3][4]. Hawaii's clean energy goals demand that we adopt EVs heavily and quickly.

* When residents discover how slow Level 1 is, many will want to upgrade to Level 2 themselves, costing them unnecessary money and trouble.

* Jurisdictions nationwide have already recognized the need for Level 2 and are increasingly standardizing building requirements accordingly.

Date: July 25, 2019

To: Councilmember Ron Menor, Chair

Members of the Zoning, Planning and Housing Committee

From: Christine Trecker

RE: Bill 25: Relating to the Adoption of the State Energy Conservation Code

I strongly support Bill 25,

I am on the Board of Directors of a condo in Honolulu with over 400 units. Our 30-year old building doesn't have EV-ready charging outlets, which is a problem for an increasing number of owners and tenants who have or want to buy electric vehicles. Unfortunately, retrofitting our 40-story building to meet the growing EV demand will be a major undertaking and extremely costly.

Since every significant automaker in the world has announced they are pivoting to an all-electric lineup, wide scale adoption of EV's is inevitable and a big plus in the fight against climate change.

Let's build smart and require the installation of EV-ready outlets in all new condos. Retrofitting later is not the answer! Please pass this environmentally friendly bill that will definitely make life easier for future condo owners and tenants.

Thank you for your time.

Christine Trecker

To: The Committee on Zoning, Planning and Housing

From: Beppie J. Shapiro

Date: Thursday, July 25, 2019

In strong support of **BILL 25**

Chair Menor and Members of the Zoning, Planning and Housing Committee:

I am delighted to have the opportunity to support Bill 25. If passed, this bill will clearly show that Honolulu County is serious about its commitment to address the fossil fuel emissions which threaten our island's physical environment. My family owns a house in Hau'ula where the beach and inner reef are already showing the effects of sea level rise: visit Kokololi'o Beach Park and see the remains of large ironwood trees which have succumbed to higher tides and rougher storms. The quicker and more decisively you move to limit green-house gas emissions, the better we will fare in the future.

Bill 25 includes several important actions toward this end without imposing disastrous costs on the economy. One is the requirement for developers to include infrastructure for electric vehicle charging in new developments. My car is a 2003 Honda and one of these days I will have to replace it - I'm definitely going to buy an electric car. If we want (as we do) to move rapidly to eliminate gasoline and diesel cars, we must make charging stations available. The cheapest way to do this is while buildings and houses are under construction.

There is however one thing I think you could do to improve it: require infrastructure Level 2 electric vehicle charging stations rather than the MUCH slower Level 1 infrastructure. That will reassure people considering buying electric cars that they can charge them conveniently. The faster charging will have another very very important benefit: charging is more likely to happen while the sun is up, making efficient use of solar energy possible.

Thank you for considering this testimony.

From: CLK Council Info
Sent: Sunday, July 21, 2019 2:26 PM
Subject: Public Infrastructure, Technology and Sustainability Speaker Registration/testimony

Speaker Registration/Testimony

Name Mike Hasselle
Phone 8084251420
Email mhasselle@gmail.com
Meeting Date 07-25-2019
Council/PH Committee PITS
Agenda Item Support for Bill 25
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No

Dear ZPH Chair Menor and Committee Members,

Please accept this written testimony in strong support of Bill 25. While not perfect, this bill will put our collective focus where our future is, on a sustainable, renewable energy future.

Written Testimony

Bill 25 will make substantial forward progress to ensure our residents and population at large have the infrastructure to expand the use of renewable energy and protect our Aina for generations to come.

Without these types of measures, Hawaii may never reach its full renewable potential. There is no planet B.

Sincerely,
Mike Hasselle
Resident, Hawaii Kai

Testimony
Attachment
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Speaker Registration/Testimony

Name Corie Tanida
 Phone 8088337162
 Email corietanida@gmail.com
 Meeting Date 07-28-2019
 Council/PH Committee Zoning
 Agenda Item Bill 25
 Your position on the matter Support
 Representing Self
 Organization
 Do you wish to speak at the hearing? No

Dear Chair Menor, Vice Chair Waters, and Committee Members,

I'm in strong support of Bill 25, 2019. I rent an apartment in Honolulu and would be interested in buying an electric car if they were more affordable, which includes the cost of the charger and associated electrical equipment.

Installing the equipment for any level of charging in a multi-unit building like mine costs thousands of dollars, making the total cost of an EV far out of reach. If that equipment is installed when the building is constructed, the cost is well under \$1,000. If my parking space already had the equipment for a charger, I'd be able to afford a modest EV. This would help slow climate change because driving it would emit no carbon dioxide.

Written Testimony Additionally, I would prefer to use water heated by renewable sources to using natural gas, i.e., methane, a greenhouse gas 84 times as potent as CO2. Currently, my water heater is gas and solar water heating would save me a great deal of money, as well as reduce my carbon footprint. Renters like me have no choice of water heaters, but this bill would at least require new residential buildings to have a renewable energy source for at least 90% of the energy for service water heating, which is something I'd take into consideration in the future.

Time is running out and we must do all that we can, now, to slow climate change, which has been exacerbated by generations of humans' disregard for the environment. This would be a major win for the environment, and save new homeowners significant money, since solar water heaters pay for themselves in under five years and never have a monthly bill. A state law has required solar water on new homes since 2010, which while the intention was good, is useless when DBEDT has approved 99% of the variances builders have applied for.

Please actively support this bill to save consumers money, reduce Hawaii's carbon dioxide emissions, and slow climate change.

Thank you for the opportunity to testify in support of Bill 25, 2019.

Corie Tanida

Testimony
Attachment
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Speaker Registration/Testimony

Name Patrick Chee
 Phone 8087838068
 Email Patrick.c.chee@gmail.com
 Meeting Date 07-25-2019
 Council/PH Committee Zoning
 Agenda Item Bill 25
 Your position on the matter Support
 Representing Self
 Organization
 Do you wish to speak at the hearing? No

Aloha City Council Members,

I support this bill because I am a condominium owner and would like my building and other similar buildings in the future to have access to electric plug-ins for their vehicles. I do, however, suggest that the bill be changed to require level 2 wiring so that 220 volt plug-ins can be installed. The higher voltage will allow cars to be charged 4 times faster than regular 110 volt plugs would.

Written Testimony

I also support new residential requirements for solar or wind generated water heating. Having electric or gas water heaters is wasteful and contributes to greenhouse gas production.

Our island is going to face significant changes in higher temperature, reduced rainfall, and damaging sea-level rise because of these greenhouse gasses. Honolulu should be a part of the solution to help reduce our impact on the planet and our island home.

Mahalo,
 Patrick Chee

Testimony Attachment

Accept Terms and Agreement 1

Speaker Registration/Testimony

Name Jerry Mershon
 Phone 808-778-5738
 Email mershonjd@gmail.com
 Meeting Date 07-25-2019
 Council/PH Committee Zoning
 Agenda Item Bill 25
 Your position on the matter Support
 Representing Self
 Organization
 Do you wish to speak at the hearing? No

To: The Committee on Zoning, Planning and Housing
 From: Jerry D. Mershon
 Date: Friday, Jul 19, 2019

In strong support of Bill 25

Dear ZPH Chair Menor and Committee Members,

Written
 Testimony

Recent and projected future advances in battery technology have most automotive authorities projecting enormous increases in the percentage of island cars powered by electric motors. Bill 25 is a step toward acknowledging this trend. Because time is a precious commodity with the modern tight schedules, please consider the merits of changing the bill's language about Level 1 charging to be Level 2 charging. I understand that Level 2 is fast becoming the standard nationwide, because it is several times faster, making EVs far more convenient and practical for homeowners and renters in a wide variety of situations. "Range anxiety" should not prevent people from switching to an EV, which nearly everyone in Hawaii must eventually do, if we are to meet the clean energy goals we are rightly so proud of.

Bolder steps, such as requiring PV on all new buildings and more widespread Level 2 EV charging readiness, should be our goal. But this bill is an important step. AC Level 1 or 2 charger readiness for 25% of new parking stalls, and 90% zero-emission energy water heating on residential buildings, are minimal requirements that should be supported by anyone with the least concern about the climate crisis, or about saving consumers money.

Our children are already wondering where is our sense of urgency in addressing their future needs as well as our own in the next few years.

Please actively support Bill 25 and take a step toward a more livable Earth. Change the Level 1 to a Level 2 requirement!

Thank you for the opportunity to testify.

Jerry Mershon
Mililani

Testimony
Attachment
Accept Terms
and 1
Agreement

Speaker Registration/Testimony

Name	Carolynn Bell-Tuttle
Phone	7784226
Email	carolynn.bell@gmail.com
Meeting Date	07-25-2019
Council/PH Committee	Zoning
Agenda Item	Bill 25
Your position on the matter	Support
Representing	Self
Organization	
Do you wish to speak at the hearing?	No
Written Testimony	
Testimony Attachment	
Accept Terms and Agreement	1

Speaker Registration/Testimony

Name Burt A Furuta
 Phone 8085336642
 Email bfuruta@hawaii.rr.com
 Meeting Date 07-25-2019
 Council/PH
 Committee Zoning
 Agenda Item Bill 25
 Your position
 on the matter Support
 Representing
 Organization Self
 Do you wish to
 speak at the
 hearing? No

Written
 Testimony

I strongly support Bill 25. However, all requirements for Level 1 EV charging should be changed to Level 2. My guess is that you haven't used Level 1 to charge an electric vehicle. It is so slow that it is not practical, especially with the longer range that new cars will have. Even with a 2011 Nissan Leaf that has a maximum capacity of 100 miles, I could not manage with Level 1. No one will want to use Level 1. It simply is not functional.

Testimony
 Attachment

Accept Terms
 and Agreement 1

Speaker Registration/Testimony

Name Caroline Kunitake
 Phone 808 782 2150
 Email caroline.m.kunitake@gmail.com
 Meeting Date 07-25-2019
 Council/PH Committee Zoning
 Agenda Item Bill 25
 Your position on the matter Support
 Representing Self
 Organization
 Do you wish to speak at the hearing? No

Dear Zoning, Planning and Housing Committee,

Please support Bill 25. We need to do all that we can to ensure that renewable energy is utilized in our condo buildings. There are so many condos on Oahu and more condos will be built to meet the need for housing.

As electric vehicles become more common, it will be vital for condos to have readily available electrical charging stations. Bill 25 provides electric vehicle charging standards for condos.

Written Testimony

We also need building codes to push condos to use more solar and wind energy to heat water.

Thank you for taking the time to review this testimony.

Mahalo,
 Caroline Kunitake

Testimony
 Attachment
 Accept Terms and Agreement 1

Speaker Registration/Testimony

Name Caroline Kunitake
 Phone 8087822150
 Email caroline.m.kunitake@gmail.com
 Meeting Date 07-25-2019
 Council/PH Committee Zoning
 Agenda Item Bill 25
 Your position on the matter Support
 Representing Self
 Organization <https://350hawaii.org/>
 Do you wish to speak at the hearing? No

Please support Bill 25 in order to promote the use of renewable energy. Our global consumption of non renewable energy is furthering the climate crisis. We need to be more proactive in our densely populated cities to encourage greater use of renewable energy. The City and County of Honolulu has the overwhelming majority of the population in the state of Hawaii. Therefore these proposed building codes will have the greatest impact for the state.

According to the Hawaii State Energy Office, Hawaii has made great inroads in increasing the amount of locally produced renewable energy. With a goal to generate 100 percent clean energy by 2045, the state will continue to:

Align government regulations and policies with clean energy goals;

Facilitate processes for developing renewable energy;

Deploy renewable generation and grid infrastructure;

Explore next generation technologies and new applications of existing technologies.

I believe it is imperative for the City and County of Honolulu to align the building codes to meet these goals.

Currently Bill 25 requires wiring for Level 1 EV chargers (which are found in your hallways for smaller appliances). Please amend this to be wiring for Level 2 EV chargers (which are the outlets for your dryer).Details are in Subsection C406.8, on pages 7-8.

Thank you for your continued interest and support in creating a sustainable and energy efficient city and county.

Mahalo,
 Caroline Kunitake

Testimony
 Attachment

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 and Agreement 1

Speaker Registration/Testimony

Name Jonathan Boyne
 Phone 8089514934
 Email boyne@hawaii.edu
 Meeting Date 07-25-2019
 Council/PH Committee Zoning
 Agenda Item Bill 25 2019
 Your position on the matter Support
 Representing Self
 Organization
 Do you wish to speak at the hearing? No

Dear ZPH Chair Menor and Committee Members,

In recent years, many bills in the state legislature have attempted to expand the infrastructure required for wider adoption of electric vehicles (EVs). Nearly all have failed.

Similarly, bills to enforce the 2010 law requiring solar water heating on every new Hawaii home have failed.

Both of these efforts are crucial pieces in our struggle to make the State zero-emission as soon as possible, and do our part to fight climate change, by far the most urgent issue of our time. The bill before you would codify very modest advances in these two areas, as a small step toward fighting the climate crisis.

Written
Testimony

I ask you to change all the bill's language about Level 1 charging to be Level 2 charging. I understand that Level 2 is fast becoming the standard nationwide, because it is several times faster, making EVs far more convenient and practical for homeowners and renters in a wide variety of situations. "Range anxiety" should not prevent people from switching to an EV, which nearly everyone in Hawaii must eventually do, if we are to meet the clean energy goals we are rightly so proud of.

Bolder steps, such as requiring PV on all new buildings and more widespread Level 2 EV charging readiness, should be our goal. But this bill is an important step. AC Level 1 or 2 charger readiness for 25% of new parking stalls, and 90% zero-emission energy water heating on residential buildings, are minimal requirements that should be supported by anyone with the least concern about the climate crisis, or about saving consumers money.

Please actively support Bill 25 and take a step toward a more livable Earth.

Thank you for the opportunity to testify.

Jonathan Boyne

Testimony

Attachment

Accept Terms
and Agreement 1

Speaker Registration/Testimony

Name Mark Hixon
 Phone 808-956-6427
 Email hixonm@hawaii.edu
 Meeting Date 07-25-2019
 Council/PH Committee Zoning
 Agenda Item 7 (Bill 25)
 Your position on the matter Support
 Representing Self
 Organization
 Do you wish to speak at the hearing? No

In strong support of Bill 25 (2019)

Aloha Committee Members,

I very much wish to buy an electric car, yet doing so is currently cost-prohibitive because of the outrageous expense (>\$1500) of installing a 120-volt (level 1) charging station in my garage.

I understand that installing such an outlet while building a multi-family structure like mine costs well under \$900 per stall. If this bill had been in effect when my home was built, then I could have much more easily afforded to buy and charge an electric vehicle.

Written Testimony A 240-volt (level 2) charging station would be even better, because I work long hours at UH Mānoa and unused charging stations there are hard to come by.

I have a photovoltaic system (which was also expensive to install) and solar water heating (which came with my home) because I believe in the importance of attaining and showcasing Hawai'i's energy independence as soon as possible.

I especially support the section of this bill that requires residential single-family buildings to "use solar, wind, or another renewable energy source for not less than 90 percent of the energy for service water heating."

Such provisions will greatly reduce Hawai'i's carbon footprint, something very important to me as an environmental scientist, father, and grandfather. Indeed, I believe that photovoltaic systems should be required on every new home, as is now the law in California.

I urge you to pass this bill. The scientific community has made it abundantly clear that we are almost out of time to address climate disruption. We truly cannot afford to wait another generation (25 years) to attain renewable energy independence. I would love to see Hawai'i become the leader for the United States and the rest of the world for fighting climate disruption.

Mahalo,
Dr. Mark Hixon

Testimony
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Accept Terms
and Agreement

1

Speaker Registration/Testimony

Name Carol Wilcox
 Phone 8087340340
 Email meleoli@yahoo.com
 Meeting Date 07-24-2019
 Council/PH
 Committee Zoning
 Agenda Item Bill 25-Energy Code Update
 Your position on
 the matter Support
 Representing Self
 Organization
 Do you wish to
 speak at the
 hearing? No

Written Testimony
 TO: The Honorable Ron Menor, Chair
 and Members
 Committee on Zoning, Planning and Housing
 Honolulu City Council
 FROM: Carol Wilcox

I hope you will support Bill 25. This is an important step toward implementation
 of State Law which mandates 100% clean energy. It also helps to keep that Hawaii
 an international leader in sustainable practices. Thank you for your time
 Carol Wilcox

Testimony
 Attachment
 Accept Terms and
 Agreement 1

TO: The Committee on Zoning, Planning and Housing
FROM: Sherry Pollack
Date: Sunday, July 21, 2019

In STRONG SUPPORT of BILL 25

Dear Zoning, Planning, and Housing Committee Chair Menor and Committee Members,

The people of Honolulu are looking to you for leadership in our fight against the climate crisis. In recent years, various climate-saving bills have been introduced at the state legislature. These bills included expanding the infrastructure required for wider adoption of electric vehicles (EVs), solar rooftop ready homes, as well as bills designed to close the solar water heater loophole. All failed despite having overwhelming support from the public.

Efforts to move to a clean energy economy and expand green infrastructure are crucial pieces in our struggle to make the State zero-emission as soon as possible, and meaningfully address the climate emergency we face. Bill 25 would help advance these zero emission efforts, making a small but very needed step in the right direction.

Bolder steps, such as requiring PV on all new buildings and more Level 2 EV charging readiness, should be our goal. But this bill is an important first step. AC Level 1 or 2 charger readiness for 25% of new parking stalls, and 90% renewable energy water heating on residential buildings, are minimal requirements that should be supported by anyone with the least concern about the climate crisis, or about saving consumers money.

Bottom-line, the legislature has failed all of us. They chose to ignore the dire warnings from climate scientists that we have less than a decade to make meaningful greenhouse gas reductions or face a collapse of our life-support system. We need leaders who have the courage to do something about the climate crisis. I hope you are those leaders.

Please actively support this bill and take a step toward a livable future on our planet.

Mahalo for this opportunity to testify.
Sherry Pollack

Speaker Registration/Testimony

Name Robert Woliver
 Phone 8082395577
 Email rwoliver1@me.com
 Meeting Date 07-25-2019
 Council/PH Committee Zoning
 Agenda Item Bill 25
 Your position on the matter Support
 Representing Self
 Organization
 Do you wish to speak at the hearing? No

Honolulu City Council
 Zoning, Planning and Housing Committee
 Support for Bill 25, "Relating to the Adoption of the State Energy Conservation Code"
 July 25, 2019, 9:00 AM hearing

Aloha Chair Menor, Vice Chair Waters, and members of the Committee,

I am testifying in strong support of Bill 25, "Relating to the Adoption of the State Energy Conservation Code."

Written
 Testimony

This is a critical clean energy and climate measure that would modernize the City & County of Honolulu's (Honolulu's) building energy code. This modernization updates Honolulu's existing building energy code—which is over thirteen years out of date—to increase occupant health and comfort while significantly reducing energy use for new homes and buildings. The proposed code revision reflects broad changes in technology, building materials, and best practices, while considering Honolulu's unique island and building environment.

In addition, this measure would ensure that new homes come equipped with either solar or high-efficiency water heaters, helping to close the loophole that has allowed thousands of fossil gas water heaters to be installed in recent housing.

Finally, Bill 25 helps Honolulu make the transition to zero emission vehicles by requiring that a certain percentage of new parking stalls be "EV-ready" (with wiring and capacity for EV chargers to be installed). This will help to make electric vehicles more accessible to residents and reduce the overall cost of our transition to clean transportation. This provision should be strengthened, however, by requiring Level 2 charging capacity in all new parking stalls (for commercial and multi-family buildings), as Vancouver and other cities have done. This will help to "future-proof"

new construction and accelerate our clean transportation future.

Please advance Bill 25 with this EV-ready amendment.

Thank you for considering my testimony.

Robert Woliver
47-373 Mawaena St.
Kaneohe, HI 96744
808-239-5577

Testimony
Attachment
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From: CLK Council Info
Sent: Monday, July 22, 2019 9:37 AM
Subject: Public Infrastructure, Technology and Sustainability Speaker Registration/testimony

Speaker Registration/Testimony

Name Kelsey Loenhorst
Phone 7609645180
Email loenhorstk@gmail.com
Meeting Date 07-24-2019
Council/PH Committee PITS
Agenda Item Bill 25
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No

Honolulu City Council
Zoning, Planning and Housing Committee
Support for Bill 25, "Relating to the Adoption of the State Energy Conservation Code"
July 24, 2019, 9:00 AM hearing

Aloha Chair Menor, Vice Chair Waters, and members of the Committee,

I am testifying in strong support of Bill 25, "Relating to the Adoption of the State Energy Conservation Code."

Written
Testimony

This is a critical clean energy and climate measure that would modernize the City & County of Honolulu's (Honolulu's) building energy code. This modernization updates Honolulu's existing building energy code—which is over thirteen years out of date—to increase occupant health and comfort while significantly reducing energy use for new homes and buildings. The proposed code revision reflects broad changes in technology, building materials, and best practices, while considering Honolulu's unique island and building environment.

In addition, this measure would ensure that new homes come equipped with either solar or high-efficiency water heaters, helping to close the loophole that has allowed thousands of fossil gas water heaters to be installed in recent housing.

Finally, Bill 25 helps Honolulu make the transition to zero emission vehicles by requiring that a certain percentage of new parking stalls be "EV-ready" (with wiring and capacity for

EV chargers to be installed). This will help to make electric vehicles more accessible to residents and reduce the overall cost of our transition to clean transportation. This provision should be strengthened, however, by requiring Level 2 charging capacity in all new parking stalls (for commercial and multi-family buildings), as Vancouver and other cities have done. This will help to “future-proof” new construction and accelerate our clean transportation future.

Please advance Bill 25 with this EV-ready amendment.

Thank you for considering my testimony.

Kelsey Loenhorst
Honolulu, HI. 96815

Testimony
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Speaker Registration/Testimony

Name Matt
 Phone 8089490003
 Email mattscalling@gmail.com
 Meeting Date 07-25-2019
 Council/PH Committee Zoning
 Agenda Item Bill 25
 Your position on the matter Support
 Representing Self
 Organization
 Do you wish to speak at the hearing? No

Aloha Chair Menor, Vice Chair Waters, and members of the Committee,

I am testifying in strong support of Bill 25, "Relating to the Adoption of the State Energy Conservation Code."

This is a critical clean energy and climate measure that would modernize the City & County of Honolulu's (Honolulu's) building energy code. This modernization updates Honolulu's existing building energy code—which is over thirteen years out of date—to increase occupant health and comfort while significantly reducing energy use for new homes and buildings. The proposed code revision reflects broad changes in technology, building materials, and best practices, while considering Honolulu's unique island and building environment.

Written
Testimony

In addition, this measure would ensure that new homes come equipped with either solar or high-efficiency water heaters, helping to close the loophole that has allowed thousands of fossil gas water heaters to be installed in recent housing.

Finally, Bill 25 helps Honolulu make the transition to zero emission vehicles by requiring that a certain percentage of new parking stalls be "EV-ready" (with wiring and capacity for EV chargers to be installed). This will help to make electric vehicles more accessible to residents and reduce the overall cost of our transition to clean transportation. This provision should be strengthened, however, by requiring Level 2 charging capacity in all new parking stalls (for commercial and multi-family buildings), as Vancouver and other cities have done. This will help to "future-proof" new construction and accelerate our clean transportation future.

Please advance Bill 25 with this EV-ready amendment.

Thank you for considering my testimony.

Testimony
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Speaker Registration/Testimony

Name Griffith H Jurgens
 Phone 8087530960
 Email gjurgens12@gmail.com
 Meeting Date 07-25-2019
 Council/PH Committee Zoning
 Agenda Item Support for Bill 25
 Your position on the matter Support
 Representing Self
 Organization
 Do you wish to speak at the hearing? No

Aloha Chair Menor, Vice Chair Waters, and members of the Committee,

I am testifying in strong support of Bill 25, "Relating to the Adoption of the State Energy Conservation Code."

This is a critical clean energy and climate measure that would modernize the City & County of Honolulu's (Honolulu's) building energy code. This modernization updates Honolulu's existing building energy code—which is over thirteen years out of date—to increase occupant health and comfort while significantly reducing energy use for new homes and buildings. The proposed code revision reflects broad changes in technology, building materials, and best practices, while considering Honolulu's unique island and building environment.

Written Testimony In addition, this measure would ensure that new homes come equipped with either solar or high-efficiency water heaters, helping to close the loophole that has allowed thousands of fossil gas water heaters to be installed in recent housing.

Finally, Bill 25 helps Honolulu make the transition to zero emission vehicles by requiring that a certain percentage of new parking stalls be "EV-ready" (with wiring and capacity for EV chargers to be installed). This will help to make electric vehicles more accessible to residents and reduce the overall cost of our transition to clean transportation. This provision should be strengthened, however, by requiring Level 2 charging capacity in all new parking stalls (for commercial and multi-family buildings), as Vancouver and other cities have done. This will help to "future-proof" new construction and accelerate our clean transportation future.

Please advance Bill 25 with this EV-ready amendment.

Thank you for considering my testimony.

Griffith Jurgens, Honolulu, HI 96816

Testimony

Attachment

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and Agreement ¹

Speaker Registration/Testimony

Name	Kehau Wray
Phone	8083432510
Email	kehauw@yahoo.com
Meeting Date	07-05-200y
Council/PH Committee	Zoning
Agenda Item	Support for Bill 25-Relating to the Adoption of the State Energy Conservation Code
Your position on the matter	Support
Representing Organization	Self
Do you wish to speak at the hearing?	No

Aloha Chair Menor, Vice Chair Waters, and members of the Committee,

I am testifying in strong support of Bill 25, "Relating to the Adoption of the State Energy Conservation Code."

This is a critical clean energy and climate measure that would modernize the City & County of Honolulu's (Honolulu's) building energy code. This modernization updates Honolulu's existing building energy code—which is over thirteen years out of date—to increase occupant health and comfort while significantly reducing energy use for new homes and buildings. The proposed code revision reflects broad changes in technology, building materials, and best practices, while considering Honolulu's unique island and building environment.

Written Testimony	In addition, this measure would ensure that new homes come equipped with either solar or high-efficiency water heaters, helping to close the loophole that has allowed thousands of fossil gas water heaters to be installed in recent housing.
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Finally, Bill 25 helps Honolulu make the transition to zero emission vehicles by requiring that a certain percentage of new parking stalls be "EV-ready" (with wiring and capacity for EV chargers to be installed). This will help to make electric vehicles more accessible to residents and reduce the overall cost of our transition to clean transportation. However, after owning my own electric vehicle for a year, I firmly believe this provision should be strengthened by requiring Level 2 charging capacity in all new parking stalls (for commercial and multi-family buildings), as Vancouver and other cities have done. This will help to "future-proof" new construction and accelerate our clean transportation future.

Please advance Bill 25 with this EV-ready amendment.

Thank you for considering my testimony.

Kristen Kehaulani Wray
Mililani, Hi 96789

Testimony

Attachment

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and Agreement ¹

Speaker Registration/Testimony

Name IAN TIERNEY
 Phone 8089497770
 Email itierney@kya.design
 Meeting Date 07-25-2019
 Council/PH
 Committee Zoning
 Agenda Item Bill 25
 Your position
 on the matter Support
 Representing Self
 Organization
 Do you wish to
 speak at the
 hearing? No

Sample testimony:

Honolulu City Council
 Zoning, Planning and Housing Committee
 Support for Bill 25, "Relating to the Adoption of the State Energy Conservation Code"
 July 25, 2019, 9:00 AM hearing

Aloha Chair Menor, Vice Chair Waters, and members of the Committee,

I am testifying in strong support of Bill 25, "Relating to the Adoption of the State Energy Conservation Code."

Written Testimony

This is a critical clean energy and climate measure that would modernize the City & County of Honolulu's (Honolulu's) building energy code. This modernization updates Honolulu's existing building energy code—which is over thirteen years out of date—to increase occupant health and comfort while significantly reducing energy use for new homes and buildings. The proposed code revision reflects broad changes in technology, building materials, and best practices, while considering Honolulu's unique island and building environment.

In addition, this measure would ensure that new homes come equipped with either solar or high-efficiency water heaters, helping to close the loophole that has allowed thousands of fossil gas water heaters to be installed in recent housing.

Finally, Bill 25 helps Honolulu make the transition to zero emission vehicles by requiring that a certain percentage of new parking stalls be "EV-ready" (with wiring and capacity for EV chargers to be installed). This will help to make electric vehicles more accessible to residents and reduce the overall cost of our transition to clean transportation. This provision should be strengthened, however, by requiring Level 2

charging capacity in all new parking stalls (for commercial and multi-family buildings), as Vancouver and other cities have done. This will help to “future-proof” new construction and accelerate our clean transportation future.

Please advance Bill 25 with this EV-ready amendment.

Thank you for considering my testimony.

Ian Tierney
Kaimuki, HI 96816

Testimony
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Speaker Registration/Testimony

Name Bradley Punu
 Phone 8083841806
 Email bradpunu@gmail.com
 Meeting Date 07-25-2019
 Council/PH Committee Zoning
 Agenda Item Bill 25
 Your position on the matter Support
 Representing Self
 Organization
 Do you wish to speak at the hearing? No

Aloha Chair Menor, Vice Chair Waters, and members of the Committee,

I am testifying in strong support of Bill 25, "Relating to the Adoption of the State Energy Conservation Code."

This is a critical clean energy and climate measure that would modernize the City & County of Honolulu's (Honolulu's) building energy code. This modernization updates Honolulu's existing building energy code—which is over thirteen years out of date—to increase occupant health and comfort while significantly reducing energy use for new homes and buildings. The proposed code revision reflects broad changes in technology, building materials, and best practices, while considering Honolulu's unique island and building environment.

Written Testimony In addition, this measure would ensure that new homes come equipped with either solar or high-efficiency water heaters, helping to close the loophole that has allowed thousands of fossil gas water heaters to be installed in recent housing.

Finally, Bill 25 helps Honolulu make the transition to zero emission vehicles by requiring that a certain percentage of new parking stalls be "EV-ready" (with wiring and capacity for EV chargers to be installed). This will help to make electric vehicles more accessible to residents and reduce the overall cost of our transition to clean transportation. This provision should be strengthened, however, by requiring Level 2 charging capacity in all new parking stalls (for commercial and multi-family buildings), as Vancouver and other cities have done. This will help to "future-proof" new construction and accelerate our clean transportation future.

Please advance Bill 25 with this EV-ready amendment.

Thank you for considering my testimony.

Brad Punu
Honolulu, HI 96822

Testimony
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and Agreement 1

Speaker Registration/Testimony

Name Adriann Gin
 Phone 8085448961
 Email agin@ulupono.com
 Meeting Date 07-25-2019
 Council/PH Committee Zoning
 Agenda Item Bill 25
 Your position on the matter Support
 Representing Self
 Organization
 Do you wish to speak at the hearing? No

Aloha Chair Menor, Vice Chair Waters, and members of the Committee,

I am testifying in strong support of Bill 25, "Relating to the Adoption of the State Energy Conservation Code."

This is a critical clean energy and climate measure that would modernize the City & County of Honolulu's (Honolulu's) building energy code. This modernization updates Honolulu's existing building energy code—which is over thirteen years out of date—to increase occupant health and comfort while significantly reducing energy use for new homes and buildings. The proposed code revision reflects broad changes in technology, building materials, and best practices, while considering Honolulu's unique island and building environment.

Written Testimony In addition, this measure would ensure that new homes come equipped with either solar or high-efficiency water heaters, helping to close the loophole that has allowed thousands of fossil gas water heaters to be installed in recent housing.

Finally, Bill 25 helps Honolulu make the transition to zero emission vehicles by requiring that a certain percentage of new parking stalls be "EV-ready" (with wiring and capacity for EV chargers to be installed). This will help to make electric vehicles more accessible to residents and reduce the overall cost of our transition to clean transportation. This provision should be strengthened, however, by requiring Level 2 charging capacity in all new parking stalls (for commercial and multi-family buildings), as Vancouver and other cities have done. This will help to "future-proof" new construction and accelerate our clean transportation future.

Please advance Bill 25 with this EV-ready amendment.

Thank you for considering my testimony.

Adriann Gin | Honolulu, HI 96821

Testimony
Attachment

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and Agreement 1

Speaker Registration/Testimony

Name Barbara George
 Phone 8086385690
 Email barbarageorge40@yahoo.com
 Meeting Date 07-25-2019
 Council/PH Committee Zoning
 Agenda Item Bill 25
 Your position on the matter Support
 Representing Self
 Organization
 Do you wish to speak at the hearing? No

Aloha Chair Menor, Vice Chair Waters, and Members of the Committee,

I am in **STRONG SUPPORT** of Bill 25, "Relating to the Adoption of the State Energy Conservation Code."

This is a critical clean energy and climate measure that would modernize the City & County of Honolulu's (Honolulu's) building energy code. The proposed code revision reflects broad changes in technology, building materials, and best practices, while considering Honolulu's unique island and building environment.

In addition, this measure would close the loophole that has allowed thousands of fossil gas water heaters to be installed in recently built housing.

Written Testimony

Finally, Bill 25 helps Honolulu make the transition to zero emission vehicles by requiring that a certain percentage of new parking stalls be "EV-ready" (with wiring and capacity for EV chargers to be installed). This provision should be strengthened, however, by requiring Level 2 charging capacity in all new parking stalls (for commercial and multi-family buildings), as Vancouver and other cities have done. This will help to "future-proof" new construction and accelerate our clean transportation future.

Please advance Bill 25 with this EV-ready amendment.
Mahalo for considering my testimony.

Barbara George
 Waialua, HI
 96791

Testimony Attachment

Accept Terms and Agreement 1

Speaker Registration/Testimony

Name	Michael Kim
Phone	8083826890
Email	ckmk@hawaii.rr.com
Meeting Date	07-25-2019
Council/PH Committee	Zoning
Agenda Item	Bill 25 (2019)
Your position on the matter	Support
Representing Organization	Self
Do you wish to speak at the hearing?	No
Written Testimony	I am in support of Bill 25 to update the C&C of Honolulu Energy Code which supports the initiative to target 100% clean energy use.
Testimony Attachment	
Accept Terms and Agreement	1

Speaker Registration/Testimony

Name Gregory Mueller
 Phone 8083832781
 Email muellerga@hawaiiantel.net
 Meeting Date 07-25-2019
 Council/PH
 Committee Zoning
 Agenda Item Bill 25
 Your position on the
 matter Support
 Representing Self
 Organization
 Do you wish to speak
 at the hearing? No

Written Testimony I support Bill 25, but I strongly recommend that the bill be changed for the
 electric car (EV) charging from level 1 to level 2. As an EV owner Level 1 is just
 to slow to be practical.
 Thank you for all you do.
 Dr Gregory Mueller

Testimony
 Attachment
 Accept Terms and
 Agreement 1

Speaker Registration/Testimony

Name Ronald Reilly
 Phone 808 967-8603
 Email rrcomm@hawaii.rr.com
 Meeting Date 07-25-2019
 Council/PH Committee Zoning
 Agenda Item Bill 25
 Your position on the matter Support
 Representing Self
 Organization
 Do you wish to speak at the hearing? No

Honolulu City Council
 Zoning, Planning and Housing Committee
 Support for Bill 25, "Relating to the Adoption of the State Energy Conservation Code"
 July 25, 2019, 9:00 AM hearing

Aloha Chair Menor, Vice Chair Waters, and members of the Committee,

I am testifying in strong support of Bill 25, "Relating to the Adoption of the State Energy Conservation Code."

Written
 Testimony

This is a critical clean energy and climate measure that would modernize the City & County of Honolulu's (Honolulu's) building energy code. This modernization updates Honolulu's existing building energy code—which is over thirteen years out of date—to increase occupant health and comfort while significantly reducing energy use for new homes and buildings. The proposed code revision reflects broad changes in technology, building materials, and best practices, while considering Honolulu's unique island and building environment.

In addition, this measure would ensure that new homes come equipped with either solar or high-efficiency water heaters, helping to close the loophole that has allowed thousands of fossil gas water heaters to be installed in recent housing.

Finally, Bill 25 helps Honolulu make the transition to zero emission vehicles by requiring that a certain percentage of new parking stalls be "EV-ready" (with wiring and capacity for EV chargers to be installed). This will help to make electric vehicles more accessible to residents and reduce the overall cost of our transition to clean transportation. This provision should be strengthened, however, by requiring Level 2 charging capacity in all new parking stalls (for commercial and multi-family buildings), as Vancouver and other cities have done. This will help to "future-proof"

new construction and accelerate our clean transportation future.

Please advance Bill 25 with this EV-ready amendment.

Thank you for considering my testimony.

Ronald Reilly, Volcano, HI 96785

Testimony

Attachment

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and Agreement ¹

Speaker Registration/Testimony

Name Roger Kiyomura
 Phone 8085469440
 Email rogerusagi@yahoo.com
 Meeting Date 07-25-2019
 Council/PH Committee Zoning
 Agenda Item Bill 25
 Your position on the matter Support
 Representing Self
 Organization
 Do you wish to speak at the hearing? No

Honolulu City Council
 Zoning, Planning and Housing Committee
 Support for Bill 25, "Relating to the Adoption of the State Energy Conservation Code"
 July 25, 2019, 9:00 AM hearing

Aloha Chair Menor, Vice Chair Waters, and members of the Committee,

I am testifying in strong support of Bill 25, "Relating to the Adoption of the State Energy Conservation Code."

Written
 Testimony

This is a critical clean energy and climate measure that would modernize the City & County of Honolulu's (Honolulu's) building energy code. This modernization updates Honolulu's existing building energy code—which is over thirteen years out of date—to increase occupant health and comfort while significantly reducing energy use for new homes and buildings. The proposed code revision reflects broad changes in technology, building materials, and best practices, while considering Honolulu's unique island and building environment.

In addition, this measure would ensure that new homes come equipped with either solar or high-efficiency water heaters, helping to close the loophole that has allowed thousands of fossil gas water heaters to be installed in recent housing.

Finally, Bill 25 helps Honolulu make the transition to zero emission vehicles by requiring that a certain percentage of new parking stalls be "EV-ready" (with wiring and capacity for EV chargers to be installed). This will help to make electric vehicles more accessible to residents and reduce the overall cost of our transition to clean transportation. This provision should be strengthened, however, by requiring Level 2 charging capacity in all new parking stalls (for commercial and multi-family buildings), as Vancouver and other cities have done. This will help to "future-proof"

new construction and accelerate our clean transportation future.

Please advance Bill 25 with this EV-ready amendment.

Thank you for considering my testimony.

Roger Kiyomura
Honolulu, HI
96814

Testimony
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Speaker Registration/Testimony

Name Tom Aitken
 Phone 8084291242
 Email capitolist@tomaitken.net
 Meeting Date 01-25-2019
 Council/PH
 Committee Zoning
 Agenda Item Bill 2500
 Your position on
 the matter Support
 Representing Self
 Organization
 Do you wish to
 speak at the
 hearing? No

I am writing in strong support of Bill 25, "Relating to the Adoption of the State Energy Conservation Code."

Written
Testimony

I also urge the committee to AMEND Bill 25 to upgrade the level of charging from Level 1 to Level 2. I used a level one charger on my base level Tesla, which has the smallest battery in the Tesla line, and it would take over 20 hours to fully charge the vehicle — IMPOSSIBLE! With my new Level 2 charger, I can fully charge the vehicle overnight.

Thank for your consideration!

Testimony
Attachment

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and Agreement

1

Speaker Registration/Testimony

Name	William A. Brizee
Phone	808 780-3198
Email	billbrizee001@gmail.com
Meeting Date	07-25-2019
Council/PH Committee	Zoning
Agenda Item	Bill 25 (2019)
Your position on the matter	Support
Representing	Self
Organization	
Do you wish to speak at the hearing?	No
Written Testimony	I am in favor adopting the State Energy Code as amended in the bill.
Testimony Attachment	
Accept Terms and Agreement	1

Speaker Registration/Testimony

Name Ryan Kohara
 Phone 8087414449
 Email kohara808@gmail.com
 Meeting Date 07-25-2019
 Council/PH Committee Zoning
 Agenda Item Support for Bill 25, "Relating to the Adoption of the State Energy Conservation Code"
 Your position on the matter Support
 Representing Self
 Organization
 Do you wish to speak at the hearing? No

Honolulu City Council
 Zoning, Planning and Housing Committee
 Support for Bill 25, "Relating to the Adoption of the State Energy Conservation Code"
 July 25, 2019, 9:00 AM hearing

Aloha Chair Menor, Vice Chair Waters, and members of the Committee,

I am a local engineer testifying in strong support of Bill 25, "Relating to the Adoption of the State Energy Conservation Code."

Written
 Testimony

This is a critical clean energy and climate measure that would modernize the City & County of Honolulu's (Honolulu's) building energy code. This modernization updates Honolulu's existing building energy code—which is over thirteen years out of date—to increase occupant health and comfort while significantly reducing energy use for new homes and buildings. The proposed code revision reflects broad changes in technology, building materials, and best practices, while considering Honolulu's unique island and building environment.

In addition, this measure would ensure that new homes come equipped with either solar or high-efficiency water heaters, helping to close the loophole that has allowed thousands of fossil gas water heaters to be installed in recent housing.

Finally, Bill 25 helps Honolulu make the transition to zero emission vehicles by requiring that a certain percentage of new parking stalls be "EV-ready" (with wiring and capacity for EV chargers to be installed). This will help to make electric vehicles more accessible to residents and reduce the overall cost of our transition to clean transportation. This provision should be strengthened, however, by requiring Level 2 charging capacity in all new parking stalls (for commercial and multi-family buildings), as Vancouver and other cities have done. This will help to "future-proof"

new construction and accelerate our clean transportation future.

Please advance Bill 25 with this EV-ready amendment.

Thank you for considering my testimony.

Ryan Kohara, P.E., LEED AP, Honolulu, HI 96813

Testimony
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From: CLK Council Info
Sent: Tuesday, July 23, 2019 7:05 AM
Subject: Council/Public Hearing Speaker Registration/Testimony

Speaker Registration/Testimony

Name	Patricia Blair
Phone	8088886393
Email	patriciablair@msn.com
Meeting Date	07-25-2019
Council/PH Committee	Council
Agenda Item	Bill 25
Your position on the matter	Support
Representing	Self
Organization	
Do you wish to speak at the hearing?	No
Written Testimony	I support adoption of the State Energy Conservation Code
Testimony Attachment	
Accept Terms and Agreement	1

From: CLK Council Info
Sent: Tuesday, July 23, 2019 7:36 AM
Subject: Council/Public Hearing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Virginia Tincher
Phone 6509969648
Email Vatincher@gmail.com
Meeting Date 07-25-2017
Council/PH Committee Council
Agenda Item Bill 25
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No

Honolulu City Council
Zoning, Planning and Housing Committee
Support for Bill 25, "Relating to the Adoption of the State Energy Conservation Code"
July 25, 2019, 9:00 AM hearing

Aloha Chair Menor, Vice Chair Waters, and members of the Committee,

I am testifying in strong support of Bill 25, "Relating to the Adoption of the State Energy Conservation Code."

Written Testimony

This is a critical clean energy and climate measure that would modernize the City & County of Honolulu's building energy code. This modernization updates Honolulu's existing building energy code—which is over thirteen years out of date—to increase occupant health and comfort while significantly reducing energy use for new homes and buildings. The proposed code revision reflects broad changes in technology, building materials, and best practices, while considering Honolulu's unique island and building environment.

In addition, this measure would ensure that new homes come equipped with either solar or high-efficiency water heaters, helping to close the loophole that has allowed thousands of gas water heaters to be installed in recent housing.

Finally, Bill 25 helps Honolulu make the transition to zero emission vehicles by requiring that a certain percentage of new parking stalls be "EV-ready" (with wiring and capacity for EV chargers to be installed in the future). This will help to make electric vehicles more accessible to residents and reduce the overall cost of our transition to clean transportation. This provision should be strengthened, however, by requiring Level 2 charging capacity in all new parking stalls (for commercial and multi-family buildings), as Vancouver and other cities have done. This will help to "future-proof" new construction and accelerate our clean transportation future.

Mahalo for considering my testimony in support of Bill 25.

Testimony
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1

From: CLK Council Info
Sent: Monday, July 22, 2019 4:48 PM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Korynn Grenert
Phone 8086758254
Email korynng@hawaii.edu
Meeting Date 07-25-2019
Council/PH Committee Zoning
Agenda Item Bill 25
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No

Aloha Chair Menor, Vice Chair Waters, and members of the Committee,

I am testifying in strong support of Bill 25, "Relating to the Adoption of the State Energy Conservation Code."

This is a critical clean energy and climate measure that would modernize the City & County of Honolulu's (Honolulu's) building energy code. This modernization updates Honolulu's existing building energy code—which is over thirteen years out of date—to increase occupant health and comfort while significantly reducing energy use for new homes and buildings. The proposed code revision reflects broad changes in technology, building materials, and best practices, while considering Honolulu's unique island and building environment.

Written
Testimony

In addition, this measure would ensure that new homes come equipped with either solar or high-efficiency water heaters, helping to close the loophole that has allowed thousands of fossil gas water heaters to be installed in recent housing.

Finally, Bill 25 helps Honolulu make the transition to zero emission vehicles by requiring that a certain percentage of new parking stalls be "EV-ready" (with wiring and capacity for EV chargers to be installed). This will help to make electric vehicles more accessible to residents and reduce the overall cost of our transition to clean transportation. This provision should be strengthened, however, by requiring Level 2 charging capacity in all new parking stalls (for commercial and multi-family buildings), as Vancouver and other cities have done. This will help to "future-proof" new construction and accelerate our clean

transportation future.

Please advance Bill 25 with this EV-ready amendment.

Thank you for considering my testimony.

Sincerely Korynn Grenert, Honolulu, HI, 96816

Testimony

Attachment

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Agreement 1

From: CLK Council Info
Sent: Monday, July 22, 2019 5:08 PM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Phaethon Keeney
Phone 8084308396
Email honokaapeople@yahoo.com
Meeting Date 07-25-2019
Council/PH Committee Zoning
Agenda Item 7, Support Bill 25 (2019)
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No

To: The Committee on Zoning, Planning and Housing
From: Phaethon Keeney
7/22/2019

In strong support of Bill 25

Dear ZPH Chair Menor and Committee Members,

Written
Testimony

Please recognize the urgency of the Climate Crisis and the pressing need to take action to mitigate our Greenhouse Gas (GHG) emissions immediately. Bill 25 is needed asap in Honolulu to make measurable headway against the threat of an unlivable planet, we here on the outer islands look to you to lead the way. If you have doubts about what we are facing, look no further than the timeline and descriptions given by thousands of scientists as elaborated in the most recent United Nations IPCC report. We face an unlivable future within our lifetime if we do not achieve 50% GHG reduction by 2030 and net 0 by 2050, in all sectors including energy, transport, agriculture and so on.

This is a monumental task, and Bill 25 is a simple and logical small step in the right direction.

Bill 25 would codify reasonable and prudent measures in energy usage in Honolulu via enforcement of the 2010 law requiring solar water heaters on new buildings and expansion of infrastructure required for wider adoption of electric vehicles (EVs).

I ask you to change all the bill's language about Level 1 charging to be Level 2 charging.

Nearly everyone in Hawaii must eventually switch to EVs in the next few decades, if we are to meet the clean energy goals we are rightly so proud of and ensure a livable planet.

Bolder steps, such as requiring PV on all new buildings and more widespread Level 2 EV charging readiness, should be our goal. But this bill is an important step. AC Level 1 or 2 charger readiness for 25% of new parking stalls, and 90% zero-emission energy water heating on residential buildings, are minimal requirements that should be supported by anyone with the least concern about the climate crisis, or about saving consumers money.

Please actively support Bill 25 and take a step toward a more livable Earth. According to recent peer reviewed articles in the journal Nature, we will likely be at 1.5C (2.7F) by 2030's, 2C (3.6F) by 2040's and, unless drastic action is taken to break this trend, 4-5C by the 2080's. This is ours and our childrens' future. Please help us make a change.

Thank you for the opportunity to testify.

Phaethon Keeney

Testimony
Attachment
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and Agreement

1

From: CLK Council Info
Sent: Monday, July 22, 2019 5:24 PM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Michele Nihipali
Phone 8082931522
Email nihipalim001@hawaii.rr.com
Meeting Date 07-25-2019
Council/PH Committee Zoning
Agenda Item Bill 25
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No

In strong support of Bill 25

Dear ZPH Chair Menor and Committee Members,

In recent years, many bills in the state legislature have attempted to expand the infrastructure required for wider adoption of electric vehicles (EVs). Nearly all have failed.

Similarly, bills to enforce the 2010 law requiring solar water heating on every new Hawaii home have failed.

Written
Testimony

Both of these efforts are crucial pieces in our struggle to make the State zero-emission as soon as possible, and do our part to fight climate change, by far the most urgent issue of our time. The bill before you would codify very modest advances in these two areas, as a small step toward fighting the climate crisis.

I ask you to change all the bill's language about Level 1 charging to be Level 2 charging. I understand that Level 2 is fast becoming the standard nationwide, because it is several times faster, making EVs far more convenient and practical for homeowners and renters in a wide variety of situations. "Range anxiety" should not prevent people from switching to an EV, which nearly everyone in Hawaii must eventually do, if we are to meet the clean energy goals we are rightly so proud of.

Bolder steps, such as requiring PV on all new buildings and more widespread Level 2 EV charging readiness, should be our goal. But this bill is an important step. AC Level 1 or 2 charger readiness for 25% of new parking stalls, and 90% zero-emission energy water heating on residential buildings, are minimal requirements that should be supported by anyone with the least concern about the climate crisis, or about saving consumers money.

Please actively support Bill 25 and take a step toward a more livable Earth.

Thank you for the opportunity to testify.

Michele Nihipali

Testimony
Attachment

Accept Terms
and Agreement

1

From: CLK Council Info
Sent: Monday, July 22, 2019 7:00 PM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Janet Graham
Phone 8083520074
Email nomadjg@gmail.com
Meeting Date 07-25-2019
Council/PH Committee Zoning
Agenda Item 7
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No

Written Testimony Thank you for the opportunity to comment on this bill. I urge you to vote for it with amendments because it is necessary if we want to achieve our fossil free goals. It should be amended from requiring level 1 EV charge to a level 2 which is adequate. Level 1 is insufficient.
Sincerely, Janet Graham

Testimony
Attachment

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From: CLK Council Info
Sent: Monday, July 22, 2019 8:17 PM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name	Kathy Shimata
Phone	8089882540
Email	kshimata@hawaiiantel.net
Meeting Date	07-25-2019
Council/PH Committee	Zoning
Agenda Item	Bill 25
Your position on the matter	Support
Representing	Self
Organization	
Do you wish to speak at the hearing?	No
Written Testimony	Please support Bill 25 to encourage more renewable energy use.
Testimony Attachment	
Accept Terms and Agreement	1

July 20, 2019

To: Chair Menor and Members of the Zoning, Planning and Housing Committee

From: Barbara Polk

RE: SUPPORT FOR BILL 25 (2019) with suggestion for amendment

Thank you for considering this important bill to reduce energy consumption as a step toward reducing global warming. I am not knowledgeable enough about all the components of the bill to comment, but I wish to support these sections of the bill.

C406.8 (p. 7): and R404.3 (p.13) Electric vehicle infrastructure and capability.

Two years ago I was in the market for a new car. I had waited several years to replace the old one because I wanted to buy an electric vehicle. I was most upset to learn that my 30 year old building would need a costly upgrade to install an Electric vehicle charger—and also didn't have a spare parking place for one. I don't want that to happen to people moving into newer homes or apartments!

Increasing energy efficiency won't happen unless there is a requirement that this infrastructure be provided in all new residential buildings, including private homes. It is also important that sufficient spaces for chargers be provided in multi-family buildings, or that each residential parking place be provided with charging capacity

I am also concerned that this bill requires only AC Level 1 stations in homes and residential buildings. Since, as I understand, a Level 1 charger takes 12 hours for a full charge, this is much too long to allow a charging station to service more than one vehicle per night. As electric vehicles gain greater popularity, stations for 25% of parking spaces will not be enough.

In addition, the technology of electric cars is advancing quickly. It is likely that in a few years, a Level 1 charger will not be sufficient, new residents will once again be unable to buy electric cars without expensive upgrading of the chargers, and the purpose of this bill will not be achieved.

For these reasons, **I urge you to amend this section to require AC Level 2 chargers in new residential buildings and increase the number of charging stations required in multi-family buildings.** The issue of climate change is too pressing to require anything less than the most advanced current technology.

Thank you for the opportunity to make these suggestions.

From: CLK Council Info
Sent: Tuesday, July 23, 2019 4:24 AM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Randy Ching
Phone 808-942-0145
Email makikirandy@yahoo.com
Meeting Date 07-25-2019
Council/PH Committee Zoning
Agenda Item 7
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? Yes

TO: The Committee on Zoning, Planning and Housing
FROM: Randy Ching

In STRONG SUPPORT of BILL 25

Dear Chair Menor and Committee Members,

The climate crisis needs to be addressed at all levels -- from individuals to businesses to NGO's to governments. The climate crisis affects everyone.

Written
Testimony

In recent years, various climate-saving bills have been introduced at the state legislature. These bills included expanding the infrastructure required for wider adoption of electric vehicles (EVs), solar rooftop ready homes, as well as bills designed to close the solar water heater loophole. All failed despite having overwhelming support from the public.

Efforts to move to a clean energy economy and expand green infrastructure are crucial pieces in our struggle to make the State zero-emission as soon as possible, and meaningfully address the climate emergency we face. Bill 25 would help advance these zero emission efforts, making a small but very needed step in the right direction.

Bolder steps, such as requiring PV on all new buildings and more Level 2 EV charging readiness, should be our goal. But this bill is an important first step. AC Level 1 or 2 charger readiness for 25% of new parking stalls, and 90% renewable energy water heating

on residential buildings, are minimal requirements that should be supported by anyone with the least concern about the climate crisis, or about saving consumers money.

Bottom-line, the legislature has failed all of us. They chose to ignore the dire warnings from climate scientists that we have less than a decade to make meaningful greenhouse gas reductions or face a collapse of our life-support system. We need leaders who have the courage to do something about the climate crisis. I hope you are those leaders.

Please actively support this bill and take a step toward a livable future on our planet.

Mahalo for this opportunity to testify.

Randy Ching

Testimony
Attachment

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From: CLK Council Info
Sent: Tuesday, July 23, 2019 7:09 AM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Stewart Taggart
Phone 8086703447
Email gqxvel9r5vf@opayq.com
Meeting Date 07-25-2019
Council/PH Committee Zoning
Agenda Item Bill 25
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No

Long-overdue enhancement of built environment energy efficiency is crucial to tackling climate change.

As long-lived assets, they can play a major role in meeting mid-century climate goals. Furthermore, research has shown energy efficient buildings are cheaper to run over the long term than energy-shabby ones. Such 'payback' needs to be more deeply incorporated into the initial approval process.

Written Testimony Bill 25 is a critical clean energy and climate measure that would modernize the City & County of Honolulu's building energy code. This modernization updates Honolulu's existing building energy code—which is over thirteen years out of date—to increase occupant health and comfort while significantly reducing energy use for new homes and buildings.

The proposed code revision reflects broad changes in technology, building materials, and best practices, while considering Honolulu's unique island and building environment.

In addition, this measure would ensure that new homes come equipped with either solar or high-efficiency water heaters, helping to close the loophole that has allowed thousands of gas water heaters to be installed in recent housing.

Finally, Bill 25 helps Honolulu make the transition to zero emission vehicles by requiring that a certain percentage of new parking stalls be "EV-ready" (with wiring and capacity for EV chargers to be installed in the future). This will help to make electric vehicles more

accessible to residents and reduce the overall cost of our transition to clean transportation. This provision should be strengthened, however, by requiring Level 2 charging capacity in all new parking stalls (for commercial and multi-family buildings), as Vancouver and other cities have done.

This will help to “future-proof” new construction and accelerate our clean transportation future.

Mahalo for considering my testimony in support of Bill 25.

Testimony
Attachment

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From: CLK Council Info
Sent: Tuesday, July 23, 2019 7:21 AM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Lei Kihoi Dunne
Phone 808 3291717
Email ponoau@me.com
Meeting Date 07-25-2019
Council/PH Committee Zoning
Agenda Item Bill 25
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No

Honolulu City Council
Zoning, Planning and Housing Committee

Re: Support for Bill 25, "Relating to the Adoption of the State Energy Conservation Code"
July 25, 2019, 9:00 AM hearing

Aloha Chair Menor, Vice Chair Waters, and members of the Committee,

Written Testimony I am testifying in strong support of Bill 25, "Relating to the Adoption of the State Energy Conservation Code."

We need to modernize the existing Building Code. And this Bill does just that. The current Honolulu's existing building energy code—which is over thirteen years out of date

This measure would ensure that new homes come equipped with either solar or high-efficiency water heaters, helping to close the loophole that has allowed thousands of gas water heaters to be installed in recent housing.

Mahalo for considering my testimony in support of Bill 25.

Aloha,

Lei Kihoi, Esq.

Testimony
Attachment

Accept Terms and
Agreement

1

Speaker Registration/Testimony

Name Larry Fukunaga
 Phone 8083960098
 Email larryfukunaga@gmail.com
 Meeting Date 07-25-2019
 Council/PH Committee Zoning
 Agenda Item Bill 25
 Your position on the matter Comment
 Representing Self
 Organization Larry K. Fukunaga & Associates
 Do you wish to speak at the hearing? No

Honolulu City Council
 Zoning, Planning and Housing Committee
 Support for Bill 25, "Relating to the Adoption of the State Energy Conservation Code"
 July 25, 2019, 9:00 AM hearing

Aloha Chair Menor, Vice Chair Waters, and members of the Committee,

I am testifying in strong support of Bill 25, "Relating to the Adoption of the State Energy Conservation Code."

Written
 Testimony

This is a critical clean energy and climate measure that would modernize the City & County of Honolulu's (Honolulu's) building energy code. This modernization updates Honolulu's existing building energy code—which is over thirteen years out of date—to increase occupant health and comfort while significantly reducing energy use for new homes and buildings. The proposed code revision reflects broad changes in technology, building materials, and best practices, while considering Honolulu's unique island and building environment.

In addition, this measure would ensure that new homes come equipped with either solar or high-efficiency water heaters, helping to close the loophole that has allowed thousands of fossil gas water heaters to be installed in recent housing.

Finally, Bill 25 helps Honolulu make the transition to zero emission vehicles by requiring that a certain percentage of new parking stalls be "EV-ready" (with wiring and capacity for EV chargers to be installed). This will help to make electric vehicles more accessible to residents and reduce the overall cost of our transition to clean transportation. This provision should be strengthened, however, by requiring Level 2 charging capacity in all new parking stalls (for commercial and multi-family buildings), as Vancouver and other cities have done. This will help to "future-proof" new

construction and accelerate our clean transportation future.

Please advance Bill 25 with this EV-ready amendment.

Thank you for considering my testimony.

Larry K. Fukunaga
Honolulu, HI

Testimony

Attachment

Accept Terms
and Agreement 1

From: CLK Council Info
Sent: Tuesday, July 23, 2019 7:45 AM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Millicent Cox
Phone 8588767416
Email midicox@gmail.com
Meeting Date 07-25-2019
Council/PH Committee Zoning
Agenda Item Bill 25
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No

Honolulu City Council
Zoning, Planning and Housing Committee
Support for Bill 25, "Relating to the Adoption of the State Energy Conservation Code"
July 25, 2019, 9:00 AM hearing

Aloha Chair Menor, Vice Chair Waters, and members of the Committee,

I am writing in strong support of Bill 25, "Relating to the Adoption of the State Energy Conservation Code."

Written
Testimony

This is a critical clean energy and climate measure that would modernize the City & County of Honolulu's building energy code. This modernization updates Honolulu's existing building energy code—which is over thirteen years out of date—to increase occupant health and comfort while significantly reducing energy use for new homes and buildings. The proposed code revision reflects broad changes in technology, building materials, and best practices, while considering Honolulu's unique island and building environment.

In addition, this measure would ensure that new homes come equipped with either solar or high-efficiency water heaters, helping to close the loophole that has allowed thousands of gas water heaters to be installed in recent housing.

Finally, Bill 25 helps Honolulu make the transition to zero emission vehicles by requiring that a certain percentage of new parking stalls be "EV-ready" (with wiring and capacity for EV chargers to be installed in the future). This will help to make electric vehicles more

accessible to residents and reduce the overall cost of our transition to clean transportation. This provision should be strengthened, however, by requiring Level 2 charging capacity in all new parking stalls (for commercial and multi-family buildings), as Vancouver and other cities have done. This will help to “future-proof” new construction and accelerate our clean transportation future.

Mahalo for considering my testimony in support of Bill 25.

Testimony
Attachment

Accept Terms and Agreement 1

From: CLK Council Info
Sent: Tuesday, July 23, 2019 7:33 AM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Marilyn Mick
Phone 8084797764
Email m2@pobox.com
Meeting Date 07-25-2019
Council/PH Committee Zoning
Agenda Item Bill 25
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No

Written Testimony I am also asking that the EV-ready provision of Bill 25 be amended to require capacity for Level 2 charging (instead of only Level 1) for new building construction. I also believe that 100% of new parking stalls should be EV-ready—a requirement that the city of Vancouver already has on the books.

Testimony
Attachment

Accept Terms and Agreement 1

Honolulu City Council
Zoning, Planning and Housing Committee
Support for Bill 25, "Relating to the Adoption of the State Energy
Conservation Code"
July 25, 2019, 9:00 AM hearing

Aloha Chair Menor, Vice Chair Waters, and members of the Committee,

I am testifying in strong support of Bill 25, "Relating to the Adoption of the State Energy Conservation Code."

This is a critical clean energy and climate measure that would modernize the City & County of Honolulu's building energy code. This modernization updates Honolulu's existing building energy code—which is over thirteen years out of date—to increase occupant health and comfort while significantly reducing energy use for new homes and buildings. The proposed code revision reflects broad changes in technology, building materials, and best practices, while considering Honolulu's unique island and building environment.

In addition, this measure would ensure that new homes come equipped with either solar or high-efficiency water heaters, helping to close the loophole that has allowed thousands of gas water heaters to be installed in recent housing.

Finally, Bill 25 helps Honolulu make the transition to zero emission vehicles by requiring that a certain percentage of new parking stalls be "EV-ready" (with wiring and capacity for EV chargers to be installed in the future). This will help to make electric vehicles more accessible to residents and reduce the overall cost of our transition to clean transportation. This provision should be strengthened, however, by requiring Level 2 charging capacity in all new parking stalls (for commercial and multi-family buildings), as Vancouver and other cities have done. This will help to "future-proof" new construction and accelerate our clean transportation future.

Mahalo for considering my testimony in support of Bill 25.

Zhelah Kayce, Kakaako

From: CLK Council Info
Sent: Tuesday, July 23, 2019 7:32 AM
Subject: Public Infrastructure, Technology and Sustainability Speaker Registration/testimony

Speaker Registration/Testimony

Name	Tia Pearson
Phone	8083064156
Email	tia.pearson@gmail.com
Meeting Date	07-25-2019
Council/PH Committee	PITS
Agenda Item	Bill 25
Your position on the matter	Support
Representing	Self
Organization	
Do you wish to speak at the hearing?	No
Written Testimony	
Testimony Attachment	
Accept Terms and Agreement	1

From: CLK Council Info
Sent: Tuesday, July 23, 2019 7:08 AM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Leslie J. Maus
Phone 808.722.2009
Email lesliemaus@yahoo.com
Meeting Date 07-25-2019
Council/PH Committee Zoning
Agenda Item Bill 25
Your position on the matter Comment
Representing Self
Organization
Do you wish to speak at the hearing? No

Honolulu City Council
Zoning, Planning and Housing Committee
Support for Bill 25, "Relating to the Adoption of the State Energy Conservation Code"
July 25, 2019, 9:00 AM hearing

Aloha Chair Menor, Vice Chair Waters, and members of the Committee,

I am testifying in strong support of Bill 25, "Relating to the Adoption of the State Energy Conservation Code."

Written Testimony

This is a critical clean energy and climate measure that would modernize the City & County of Honolulu's building energy code. This modernization updates Honolulu's existing building energy code—which is over thirteen years out of date—to increase occupant health and comfort while significantly reducing energy use for new homes and buildings. The proposed code revision reflects broad changes in technology, building materials, and best practices, while considering Honolulu's unique island and building environment.

In addition, this measure would ensure that new homes come equipped with either solar or high-efficiency water heaters, helping to close the loophole that has allowed thousands of gas water heaters to be installed in recent housing.

Finally, Bill 25 helps Honolulu make the transition to zero emission vehicles by requiring that a certain percentage of new parking stalls be "EV-ready" (with wiring and capacity for

EV chargers to be installed in the future). This will help to make electric vehicles more accessible to residents and reduce the overall cost of our transition to clean transportation. This provision should be strengthened, however, by requiring Level 2 charging capacity in all new parking stalls (for commercial and multi-family buildings), as Vancouver and other cities have done. This will help to “future-proof” new construction and accelerate our clean transportation future.

Mahalo for considering my testimony in support of Bill 25.

Leslie J. Maus, Kane'ohe

Testimony
Attachment

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Speaker Registration/Testimony

Name Bruce Barnes
 Phone 2067797769
 Email Mrbrucebarnes@gmail.com
 Meeting Date 07-25-2019
 Council/PH Committee Zoning
 Agenda Item Bill 25
 Your position on the matter Comment
 Representing Self
 Organization
 Do you wish to speak at the hearing? No

Honolulu City Council
 Zoning, Planning and Housing Committee
 Support for Bill 25, "Relating to the Adoption of the State Energy Conservation Code"
 July 25, 2019, 9:00 AM hearing

Aloha Chair Menor, Vice Chair Waters, and members of the Committee,

I am testifying in strong support of Bill 25, "Relating to the Adoption of the State Energy Conservation Code.". But would like the EV apartment revision strengthened.

This provision should be strengthened, however, by requiring Level 2 charging capacity in all new parking stalls (for commercial and multi-family buildings), as Vancouver and other cities have done. This will help to "future-proof" new construction and accelerate our clean transportation future.

Written
 Testimony

Level 1 is 120V/15A or your standard plug. That is a recharge rate of 600W per hour or between 3 and 6 miles per hour. An overnight charge is 60 miles.

Level 2 is 220V/30A or a dryer plug. That is a recharge rate of 6,600W per hour or 30 to 60 miles an hour. That means in 1 hour you get as much charge as 12 hours of a level 1!

That difference could mean faster charging, which would speed turn around times for vehicles who just sit and charge. Imagine a scenario of 100 apartments with 25 EV spots as written now, but 30 EVs. The first 25 will sit in the charging spot and charge all night or day to get back to full. Those other 5 are out of luck. But if we change it to level 2 requirement, those 25 spots could actually satisfy the charging need of the entire apartment complex, aiding future EV growth and dependence upon gas and fuel.

The cost increase for level 2 is mostly in the added cost of thicker copper, as the assumption is the digging and plug and housing are all very similar. So nearly no reason not to include the level 2 requirement.

Please advance Bill 25 with this EV-ready amendment.

Thank you for considering my testimony.

Bruce Barnes, Honolulu, HI 96819

Testimony

Attachment

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and Agreement 1

From: CLK Council Info
Sent: Tuesday, July 23, 2019 7:54 AM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Colin G Hosking
Phone 808-492-0023
Email colinhosking.ch@gmail.com
Meeting Date 07-25-2019
Council/PH Committee Zoning
Agenda Item Bill 25
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No

Aloha Chair Menor, Vice Chair Waters, and members of the Committee,

I am writing you today to testify in firm support of Bill 25, "Relating to the Adoption of the State Energy Conservation Code."

Written
Testimony

We as a community and a species are at a critical juncture in the fight to mitigate the worst effects of climate change. This update to the City & County of Honolulu's building energy code is a step in the direction we need to be taking. Bill 25 is smart legislation that will make it easier for the citizens of our great city to become better stewards of our environment and save money on monthly energy costs. As we all know, with the cost of housing and childcare, any money saved on our monthly utilities is a blessing.

In particular, the provision requiring a certain percentage of new parking stall be EV ready is sorely needed. I recently took ownership of my new condo at Ke Kilohana. While it is a wonderful building, it only came equipped with two EV stalls out of hundreds. Now I and other owners who wish to make the transition to an EV will have to spend much more money and time in attempting to retrofit our stalls in comparison to a developer who could have negotiated a better bulk contract and included the EV wiring and hardware into the original building design.

Bill 25 and others like it that push our city to be cleaner and more efficient must be passed. The gains could be substantial.

Mahalo for considering my testimony in support of Bill 25.

Colin G. Hosking, Ward Village

From: CLK Council Info
Sent: Tuesday, July 23, 2019 7:52 AM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Mark Nokes
Phone 8089212265
Email manokes@yahoo.com
Meeting Date 07-25-2019
Council/PH Committee Zoning
Agenda Item Bill 25
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No

Honolulu City Council
Zoning, Planning and Housing Committee
Support for Bill 25, "Relating to the Adoption of the State Energy Conservation Code"
July 25, 2019, 9:00 AM hearing

Aloha Chair Menor, Vice Chair Waters, and members of the Committee,

I am testifying in strong support of Bill 25, "Relating to the Adoption of the State Energy Conservation Code."

Written Testimony

This is a critical clean energy and climate measure that would modernize the City & County of Honolulu's building energy code. This modernization updates Honolulu's existing building energy code—which is over thirteen years out of date—to increase occupant health and comfort while significantly reducing energy use for new homes and buildings. The proposed code revision reflects broad changes in technology, building materials, and best practices, while considering Honolulu's unique island and building environment.

In addition, this measure would ensure that new homes come equipped with either solar or high-efficiency water heaters, helping to close the loophole that has allowed thousands of gas water heaters to be installed in recent housing.

Finally, Bill 25 helps Honolulu make the transition to zero emission vehicles by requiring that a certain percentage of new parking stalls be "EV-ready" (with wiring and capacity for EV chargers to be installed in the future). This will help to make electric vehicles more

accessible to residents and reduce the overall cost of our transition to clean transportation. This provision should be strengthened, however, by requiring Level 2 charging capacity in all new parking stalls (for commercial and multi-family buildings), as Vancouver and other cities have done. This will help to “future-proof” new construction and accelerate our clean transportation future.

Mahalo for considering my testimony in support of Bill 25.

Mark A. Nokes, Ph.D.
3805 Kanaina Ave Apt 304
Honolulu, HI 96815

Testimony
Attachment
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From: CLK Council Info
Sent: Tuesday, July 23, 2019 7:51 AM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Rebeca Zamora
Phone 8085851974
Email rebezamo@gmail.com
Meeting Date 07-25-2019
Council/PH Committee Zoning
Agenda Item "Relating to the Adoption of the State Energy Conservation Code"
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No

This is a critical clean energy and climate measure that would modernize the City & County of Honolulu's building energy code. This modernization updates Honolulu's existing building energy code—which is over thirteen years out of date—to increase occupant health and comfort while significantly reducing energy use for new homes and buildings. The proposed code revision reflects broad changes in technology, building materials, and best practices, while considering Honolulu's unique island and building environment.

In addition, this measure would ensure that new homes come equipped with either solar or high-efficiency water heaters, helping to close the loophole that has allowed thousands of gas water heaters to be installed in recent housing.

Written Testimony

Finally, Bill 25 helps Honolulu make the transition to zero emission vehicles by requiring that a certain percentage of new parking stalls be "EV-ready" (with wiring and capacity for EV chargers to be installed in the future). This will help to make electric vehicles more accessible to residents and reduce the overall cost of our transition to clean transportation. This provision should be strengthened, however, by requiring Level 2 charging capacity in all new parking stalls (for commercial and multi-family buildings), as Vancouver and other cities have done. This will help to "future-proof" new construction and accelerate our clean transportation future.

Mahalo for considering my testimony in support of Bill 25.

Testimony
Attachment

Honolulu City Council
Zoning, Planning and Housing Committee
Support for Bill 25, "Relating to the Adoption of the State Energy Conservation Code"
July 25, 2019, 9:00 AM hearing

Aloha Chair Menor, Vice Chair Waters, and members of the Committee,

As a member of the Sierra Club, I was encouraged to contact you related to BILL 25. With this letter, I would like to testify in strong support of this bill - "Relating to the Adoption of the State Energy Conservation Code."

It is commonly understood that construction companies and homeowners have often side-stepped the "option" to install solar energy accumulators on their home building projects due to current loop-holes in the current building codes requirements. Hopefully Bill 25 will strengthen the state, city and county's effort to reduce fossil fuel consumption in Hawai'i.

This is a very critical clean energy and climate measure that would modernize the City & County of Honolulu's building energy code. This modernization updates Honolulu's existing building energy code—which is over thirteen years out of date—to increase occupant health and comfort while significantly reducing energy use for new homes and buildings. The proposed code revision reflects broad changes in technology, building materials, and best practices, while considering Honolulu's unique island and building environment.

In addition, this measure would ensure that new homes come equipped with either solar or high-efficiency water heaters, helping to close the loophole that has allowed thousands of gas water heaters to be installed in recent housing.

Finally, Bill 25 helps Honolulu make the transition to zero emission vehicles by requiring that a certain percentage of new parking stalls be "EV-ready" (with wiring and capacity for EV chargers to be installed in the future). This will help to make electric vehicles more accessible to residents and reduce the overall cost of our transition to clean transportation. This provision should be strengthened, however, by requiring Level 2 charging capacity in all new parking stalls (for commercial and multi-family buildings), as Vancouver and other cities have done. This will help to "future-proof" new construction and accelerate our clean transportation future.

Mahalo for considering this testimony in support of Bill 25 and thank you for your continued work making Oahu the best place to live and work in the world.

David Scott Gilbert, RN, MPH

Kaneohe, Hawai'i

From: CLK Council Info
Sent: Tuesday, July 23, 2019 8:02 AM
Subject: Council/Public Hearing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Michele A Halligan
Phone 5306242671
Email mahalligan1@gmail.com
Meeting Date 07-25-2019
Council/PH Committee Council
Agenda Item Bill 25 - "Relating to the Adoption of the State Energy Conservation Code"
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No

Honolulu City Council
Zoning, Planning and Housing Committee
Support for Bill 25, "Relating to the Adoption of the State Energy Conservation Code"
July 25, 2019, 9:00 AM hearing

Aloha Chair Menor, Vice Chair Waters, and members of the Committee,

Written Testimony As a former resident of Maui and dedicated supporter of the health of the Hawaiian Islands, I am testifying in strong support of Bill 25, "Relating to the Adoption of the State Energy Conservation Code."

This is a critical clean energy and climate measure that would modernize the City & County of Honolulu's building energy code. This modernization updates Honolulu's existing building energy code—which is over thirteen years out of date—to increase occupant health and comfort while significantly reducing energy use for new homes and buildings. The proposed code revision reflects broad changes in technology, building materials, and best practices, while considering Honolulu's unique island and building environment.

In addition, this measure would ensure that new homes come

equipped with either solar or high-efficiency water heaters, helping to close the loophole that has allowed thousands of gas water heaters to be installed in recent housing.

Finally, Bill 25 helps Honolulu make the transition to zero emission vehicles by requiring that a certain percentage of new parking stalls be "EV-ready" (with wiring and capacity for EV chargers to be installed in the future). This will help to make electric vehicles more accessible to residents and reduce the overall cost of our transition to clean transportation. This provision should be strengthened, however, by requiring Level 2 charging capacity in all new parking stalls (for commercial and multi-family buildings), as Vancouver and other cities have done. This will help to "future-proof" new construction and accelerate our clean transportation future.

Mahalo for considering my testimony in support of Bill 25.

Testimony
Attachment
Accept Terms
and Agreement

1

From: CLK Council Info
Sent: Tuesday, July 23, 2019 8:19 AM
Subject: Council/Public Hearing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Kenneth Eisner
Phone 7698770212
Email ken_eisner@yahoo.com
Meeting Date 07-25-2019
Council/PH Committee Council
Agenda Item Act 25/Bill 25
Your position on the matter Support
Representing Organization Self
Do you wish to speak at the hearing? No

Aloha,

I support the essence of this bill. Charging infrastructure is really important because electric vehicles are the future.

Written Testimony My only request is that Level 2 charging is made available instead of Level 1. Most electric vehicles would benefit from Level 2 charging because it charges the car at a faster rate than Level 1. Level 1 is more of a trickle charge and isn't beneficial vs a Level 2 charger that put more electricity into the battery. Most EV homeowners have Level 2 charging at their homes and prefer it over Level 1.

Thank you for your consideration.

Testimony Attachment
Accept Terms and Agreement

1

From: CLK Council Info
Sent: Tuesday, July 23, 2019 8:45 AM
Subject: Council/Public Hearing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Noel J. Kent
Phone 5990923
Email noelk@hawaii.edu
Meeting Date 07-23-2019
Council/PH Committee Council
Agenda Item #25
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No

Written
Testimony

This bill comes at a critical time in efforts to minimize the hugely dangerous impacts of fossil fuel emissions on the global climate crisis. By modernizing the Conservation code we will be increasing the use of sustainable energy sources in our imperilled islands.
Thank you Noel

Testimony
Attachment

Accept Terms
and Agreement

1

Honolulu City Council
Zoning, Planning and Housing Committee
Support for Bill 25, "Relating to the Adoption of the State Energy Conservation Code"
July 25, 2019, 9:00 AM hearing

Aloha Chair Menor, Vice Chair Waters, and members of the Committee,

I am testifying in strong support of Bill 25, "Relating to the Adoption of the State Energy Conservation Code." The significant, cost-effective changes proposed in Bill 25 will help to dramatically reduce the greenhouse gas emissions from our new homes and buildings while helping to foster our transition to clean transportation. These changes will result in higher efficiency standards and energy cost-savings as follows:

1. Updating the existing building efficiency code—which is over thirteen years out of date—with new energy saving measures, such as better insulation, improved lighting, and smarter controls for new residential and commercial construction. This alone is estimated to save nearly \$1 billion in energy costs for O'ahu over the next 20 years.
2. Ensuring all new homes come equipped with either a solar water heater, a high-efficiency heat pump water heater, or a "smart" grid-interactive water heater instead of the energy inefficient gas water heaters that have been installed to date.
3. Requiring that new commercial and multi-family development, above a certain size, be "electric vehicle-ready" in a significant percent if not 100% percent of the parking stalls. Studies have shown that installing EV infrastructure at the time of construction can be 91% less expensive than post-construction retrofits. This provision will also help to make electric vehicles more accessible to residents and reduce the overall cost of our transition to clean transportation. Please note that this provision should be strengthened by requiring Level 2 charging capacity in all new parking stalls, as Vancouver and other cities have done, to help "future-proof" new construction and accelerate our clean transportation future.

Thank you for considering this testimony in support of Bill 25.

Sincerely,



Therese Argoud, MPH

3314 Woodlawn Drive

Honolulu, Hawaii 96822

From: CLK Council Info
Sent: Tuesday, July 23, 2019 9:47 AM
Subject: Public Infrastructure, Technology and Sustainability Speaker Registration/testimony

Speaker Registration/Testimony

Name	Richard Crouch
Phone	944-5862
Email	tcrouch@punahou.edu
Meeting Date	07-29-2019
Council/PH Committee	PITS
Agenda Item	Bill 25
Your position on the matter	Support
Representing	Self
Organization	
Do you wish to speak at the hearing?	No
Written Testimony	I strongly support Bill 25. We need to continue to improve our infrastructure.
Testimony Attachment	
Accept Terms and Agreement	1

From: CLK Council Info
Sent: Tuesday, July 23, 2019 12:21 PM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Richard Furst
Phone 8083088925
Email Rfurst808@gmail.com
Meeting Date 07-25-2019
Council/PH Committee Zoning
Agenda Item Support for Bill 25, "Relating to the Adoption of the State Energy Conservation Code"
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No

Aloha Chair Menor, Vice Chair Waters, and members of the Committee,

I am testifying in strong support of Bill 25, "Relating to the Adoption of the State Energy Conservation Code."

This is a critical clean energy and climate measure that would modernize the City & County of Honolulu's building energy code. This modernization updates Honolulu's existing building energy code—which is over thirteen years out of date—to increase occupant health and comfort while significantly reducing energy use for new homes and buildings. The proposed code revision reflects broad changes in technology, building materials, and best practices, while considering Honolulu's unique island and building environment.

Written
Testimony

In addition, this measure would ensure that new homes come equipped with either solar or high-efficiency water heaters, helping to close the loophole that has allowed thousands of gas water heaters to be installed in recent housing.

Finally, Bill 25 helps Honolulu make the transition to zero emission vehicles by requiring that a certain percentage of new parking stalls be "EV-ready" (with wiring and capacity for EV chargers to be installed in the future). This will help to make electric vehicles more accessible to residents and reduce the overall cost of our transition to clean transportation. This provision should be strengthened, however, by requiring Level 2 charging capacity in all new parking stalls (for commercial and multi-family buildings), as Vancouver and other cities have done. This will help to "future-proof" new construction and accelerate our clean transportation future.

Mahalo for considering my testimony in support of Bill 25.

Sincerely,

Richard A. Furst, AIA

Testimony
Attachment

Accept Terms and
Agreement 1

From: CLK Council Info
Sent: Tuesday, July 23, 2019 12:06 PM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Eunice
Phone 808 358 5019
Email euniceseetml@gmail.com
Meeting Date 07-25-2019
Council/PH Committee Zoning
Agenda Item Bill 25
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No

Honolulu City Council
Zoning, Planning and Housing Committee
Support for Bill 25, "Relating to the Adoption of the State Energy Conservation Code"
July 25th, 2019, 9:00AM hearing

Aloha Chair Menor, Vice Chair Waters, and members of the Committee,

My name is Eunice Seet, a member of the Honolulu community. I am here to testify in support of the Bill 25, "Relating to the Adoption of the State Energy Conservation Code."

Written
Testimony

This bill's investment is a step of progress towards protecting the lives our future ohana and a step closer to meeting Honolulu's climate goals in 2045. Honolulu's commitment to meeting its energy needs with 100 percent renewable energy by 2045 may seem impossible but achievable with the passing of bills like this.

The proposed code revision includes technology, building measures and best solutions, while still honoring Honolulu's unique environment, will aid in improving the overall occupant health and community. I fully support the proposed amendments for constructive buildings in Honolulu's tropical climate that would cut our utility energy bills into half.

According to the National Resources Defense Council in Hawaii, The solar-powered water heating in most newly constructed single family homes can avoid the equivalent of 26-27 barrels of imported oil and save between \$4,200 and \$8,800 over a typical water heater lifetime (15 years).

Currently, there are market shifts into investments of electrical vehicles among Honolulu residents and moving into EV-ready buildings. In my building, there is only 1 allotted EV space for the entire high rise building. The competition for time and space during the day can play a factor in influencing people's habits of purchasing electrical vehicles that can ultimately influence their individual carbon footprint.

Moreover, the Honolulu's amendments can save an estimate between \$1.4million to \$3.4 million with EV-ready lots built into new construction mandates (NRDC). This will help to make electric vehicles more accessible to residents and reduce overall cost of our transition to clean transportation. Vancouver has already set an example and shown us that it can be done.

I am excited to be part of a community that stands to protect the health of the public. Mahalo for considering my testimony in support of Bill 25.

Eunice Seet, member of Honolulu community.

Testimony
Attachment

Accept Terms and 1
Agreement

From: CLK Council Info
Sent: Tuesday, July 23, 2019 10:23 AM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Janice Palma-Glennie
Phone 8083240092
Email palmtree7@earthlink.net
Meeting Date 07-25-2019
Council/PH Committee Zoning
Agenda Item Bill 25
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No

Aloha!

I strongly support Bill 25 which will help our climate and clean energy future. I also strongly support the points made by the State Sierra Club that say the following:

Bill 25 updates the existing building efficiency code—which is over thirteen years out of date—with new energy saving measures, such as better insulation, improved lighting, and smarter controls for new residential and commercial construction. This alone is estimated to save nearly \$1 billion in energy costs for O‘ahu over the next 20 years.

It ensures that all new homes will come equipped with either a solar water heater, a high-efficiency heat pump water heater, or a “smart” grid-interactive water heater (that will allow us to use more renewable energy on the power grid).

Written Testimony It requires that new commercial and multi-family development, above a certain size, be “electric vehicle-ready” (having the wiring, conduit, and electrical capacity for charging stations to be installed later) in at least 25% of the parking stalls. Studies have shown that installing EV infrastructure at the time of construction can be 91% less expensive than post-construction retrofits.

These are significant, cost-effective changes that will help to dramatically reduce the greenhouse gas emissions from our new homes and buildings while helping to foster our transition to clean transportation.

We are asking that the EV-ready provision of Bill 25 be amended to require capacity for Level 2 charging (instead of only Level 1) for new building construction. We also believe that 100% of new parking stalls should be EV-ready—a requirement that the city of Vancouver already has on the books.

Mahalo for taking my views and those of the greater public into account when you make your decision to VOTE "FOR" Bill 25.

sincerely,
janice palms-glennie

Testimony

Attachment

Accept Terms and Agreement 1

From: CLK Council Info
Sent: Tuesday, July 23, 2019 10:20 AM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name	Javier Mendez
Phone	8083214434
Email	menjavi@gmail.com
Meeting Date	07-25-2019
Council/PH Committee	Zoning
Agenda Item	Bill 25
Your position on the matter	Support
Representing	Self
Organization	
Do you wish to speak at the hearing?	No
Written Testimony	
Testimony Attachment	
Accept Terms and Agreement	1

From: CLK Council Info
Sent: Tuesday, July 23, 2019 9:52 AM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Emily Barber
Phone 817-657-9802
Email Eabarber@swbell.net
Meeting Date 07-25-2019
Council/PH Committee Zoning
Agenda Item Bill 25
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No

Honolulu City Council
Zoning, Planning and Housing Committee
Support for Bill 25, "Relating to the Adoption of the State Energy Conservation Code"
July 25, 2019, 9:00 AM hearing

Aloha Chair Menor, Vice Chair Waters, and members of the Committee,

I am testifying in strong support of Bill 25, "Relating to the Adoption of the State Energy Conservation Code."

Written
Testimony

This is a critical clean energy and climate measure that would modernize the City & County of Honolulu's building energy code. This modernization updates Honolulu's existing building energy code—which is over thirteen years out of date—to increase occupant health and comfort while significantly reducing energy use for new homes and buildings. The proposed code revision reflects broad changes in technology, building materials, and best practices, while considering Honolulu's unique island and building environment.

In addition, this measure would ensure that new homes come equipped with either solar or high-efficiency water heaters, helping to close the loophole that has allowed thousands of gas water heaters to be installed in recent housing.

Finally, Bill 25 helps Honolulu make the transition to zero emission vehicles by requiring that a certain percentage of new parking stalls be "EV-ready" (with wiring and capacity for EV chargers to be installed in the future). This will help to make electric vehicles more

accessible to residents and reduce the overall cost of our transition to clean transportation. This provision should be strengthened, however, by requiring Level 2 charging capacity in all new parking stalls (for commercial and multi-family buildings), as Vancouver and other cities have done. This will help to “future-proof” new construction and accelerate our clean transportation future.

Mahalo for considering my testimony in support of Bill 25.

Emily Barber, Kahala

Testimony

Attachment

Accept Terms and
Agreement 1

From: CLK Council Info
Sent: Tuesday, July 23, 2019 11:59 AM
Subject: Public Infrastructure, Technology and Sustainability Speaker Registration/testimony

Speaker Registration/Testimony

Name Lionel Ahina
Phone 808222-4747
Email lahina05@gmail.com
Meeting Date 07-23-2019
Council/PH Committee PITS
Agenda Item Bill 25
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No

Written
Testimony

The cost of living in Hawaii is about 30% more than the rest of the United States. I have two of my children who moved to the Mainland because of this reason. We have to start somewhere to make it more affordable for our younger generation to financially live here. Let's start with our natural energy the sun, wind, and cold ocean water to offset the crude oil that will only increase in cost and make our utility bills go even higher than what it is now. Please let Bill 25 pass so that we are making a positive step forward in reducing our carbon footprint in our Aina.

Testimony
Attachment

Accept Terms and Agreement 1

July 23, 2019

Honolulu City Council
Zoning, Planning and Housing Committee

Re: Support of Bill 25, "Relating to the Adoption of the State
Energy Conservation Code" July 25, 2019, 9:00 a.m., Hearing

Dear Chair Menor, Vice Chair Waters, and Members of the Committee:

I am testifying in strong support of Bill 25, "Relating to the Adoption of the State Energy Conservation Code."

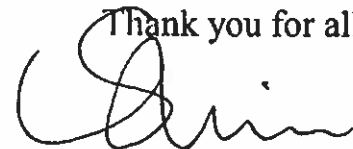
I have felt helpless in the wake of our national Republican administration's stripping away of so many environmental protections. I am glad to have this opportunity to make my voice heard about the environment of our beautiful state.

Simply put, if I'd had electrical charging stations available, and known how to use them, I would have bought an electric vehicle years ago. Requiring Level 2 charging stations in all new parking stalls (commercial, as well as multi-family buildings), will help our state reduce the overall cost of our transition to clean transportation. **It will open the door for more and more of us to purchase electric vehicles.**

Requiring new homes to be built with either solar or high-efficiency water heaters will also significant reduce energy usage for new homes.

Let's do it!

Thank you for allowing me to make this contribution, Oahu Sierra Club!



Laurel Shim
217 Prospect Street, #D10
Honolulu, Hawaii 96813
808-497-7547 (cell)

P.S. Purchasing electric buses and utilizing them every 8-10 minutes from West and North Oahu to downtown and back would have made SO much more sense that this debacle of a rail system we're building! We have a great bus system, that could have been expanded upon to totally manage our growing traffic problems. What on earth were we thinking? Let's not make another mistake like the rail mistake—let's pass Bill 25!

From: CLK Council Info
Sent: Tuesday, July 23, 2019 2:53 PM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Dawn Lippert
Phone (808) 333-9741
Email dawn@elementalexcelerator.com
Meeting Date 07-25-2019
Council/PH Committee Zoning
Agenda Item Bill 025
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No

Dear Chair Menor, Vice-Chair Waters, and Members of the Committee on Zoning, Planning, and Housing:

I am submitting testimony in strong support of Bill 25, which regulates the design and construction of residential and commercial buildings for the effective use of energy through the adoption of the State Energy Conservation Code (2017), subject to local amendments by the City and County of Honolulu. I am a resident of the Diamond Head neighborhood, Council District 4.

Written
Testimony

First, I applaud our City's leadership in this effort. Our existing building energy code is over thirteen years out of date. The proposed code revisions reflect the broad changes in technology, building materials, and best practices that account for Honolulu's unique island and building environment. For the next twenty years, our City can save nearly \$1 billion in energy costs with these updated codes. This factor is essential to consider with our State's high cost of living.

Secondly, with new housing development, this measure would ensure we equip new housing with either solar or high-efficiency water heaters that support our State's clean energy goals. It will end the loophole that has allowed recent housing projects to avoid putting in solar.

Finally, Bill 25 helps Honolulu make the transition to zero-emission vehicles by requiring that a certain percentage of new parking stalls be "EV-ready." This makes electric vehicles more accessible to residents, reduce the overall cost of our transition to clean transportation, and reaffirms our City's commitment to 100% renewable ground transportation by 2045.

Updating our building codes is crucial in reducing energy costs while increasing family health and comfort. For a more sustainable Honolulu, I urge you to pass Bill 25. Mahalo for the opportunity to testify.

Sincerely,
Dawn Lippert

Testimony
Attachment

Accept Terms
and Agreement

1

From: CLK Council Info
Sent: Tuesday, July 23, 2019 4:06 PM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Denise Boisvert
Phone 415-845-5495
Email infofordenise@yahoo.com
Meeting Date 07-25-2019
Council/PH Committee Zoning
Agenda Item Bill 25
Your position on the matter Support
Representing Self
Organization

Do you wish to speak at the hearing? No

Dear Chair Menor, Vice Chair Waters, and members of the Committee,

As a passionate environmentalist, I ask for your support of Bill 25.

Written Testimony

The best time to think about the future is right now.

Respectfully yours,
Denise Boisvert

Testimony Attachment

Accept Terms and Agreement

1

From: CLK Council Info
Sent: Tuesday, July 23, 2019 3:49 PM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Kim Jorgensen
Phone 415-845-5495
Email hawaiiicondo@yahoo.com
Meeting Date 07-25-2019
Council/PH Committee Zoning
Agenda Item Bill 25
Your position on the matter Support
Representing Self
Organization

Do you wish to speak at the hearing? No

I strongly support Bill 25, and hope that you do as well.

Written Testimony

Thank you for your kind consideration.

Testimony Attachment

Accept Terms and Agreement 1

Speaker Registration/Testimony

Name Nathan Sparks
 Phone 808-271-5701
 Email nathan_a_sparks@yahoo.com
 Meeting Date 07-24-2019
 Council/PH Committee Zoning
 Agenda Item Bill 25 (2019)
 Your position on the matter Support
 Representing Self
 Organization
 Do you wish to speak at the hearing? Yes

My comments are in support of this bill, but with an amendment to support more practical application for EV charging.

Written
Testimony

1. There are dozens of new EVs scheduled to come out in the next 1-2 years, including trucks and EVs. Many of these will come with longer mileage ranges of over 200 miles which will make them attractive to island users, however, with level 1 charging it will literally take a couple of days to achieve a full charge - amend the bill to require level 2 charging for practical purposes. There may be some economic burden on developers and homeowners, but the burden will be much more later if they have to retrofit the outlets down the road, up to 10 times more.

2. The solar water heating provision is also critical as it goes hand in hand with affordable housing goals by reducing utility costs. As more people drive EVs, there utility costs are likely to rise so a solution to offset that makes sense. I would take it a step further and require some form of PV to structures that can support it to align better with the State's goals of 100% renewal energy by 2045.

It's good that some steps are being taken to mitigate climate change albeit very small steps. We cannot be bound by opposition to inconveniences. We learn in business about change management; when there is change, a lot of people are concerned and express opposition because they fear change. When change is necessary the business overcomes the fear by educating the workers on why the change is necessary and what to expect. This eases fear and promotes adoption. The government at both the Federal and Local level has not done near enough to educate the public on why these changes are necessary. Most of the general public today think the sum of the climate change impacts will be warmer weather, a few more storms every summer and a few feet of sea level rise over the next 50 years. They either aren't aware of the worst outcomes of climate change or haven't bought in because they don't see or hear much from the government. They don't realize we are in a fight for our lives and for those of our children. If we don't do enough now we will likely see the collapse of civilization in our life time. This unfortunate reality needs to be validated by the government publicly so people

understand and buy in to what needs to happen to save our future.

It's not enough to just do our part. With all the rooftop solar already in place, and the access to so many renewable forms of power including solar, wind and hydroelectric, our state is in a unique position to become an economic model for renewable energy conversion, one that will inspire other states and nations. The current federal administration is out to lunch at the most critical moment in history for the future of mankind, it is really up to the state and local governments as well as private industry to get the ball rolling now. Mahalo.

Testimony

Attachment

Accept Terms

and 1

Agreement

Sample testimony:

Honolulu City Council
Zoning, Planning and Housing Committee
Support for Bill 25, "Relating to the Adoption of the State Energy Conservation Code"
July 25, 2019, 9:00 AM hearing

Aloha Chair Menor, Vice Chair Waters, and members of the Committee,

I am testifying in strong support of Bill 25, "Relating to the Adoption of the State Energy Conservation Code."

This is a critical clean energy and climate measure that would modernize the City & County of Honolulu's building energy code. This modernization updates Honolulu's existing building energy code—which is over thirteen years out of date—to increase occupant health and comfort while significantly reducing energy use for new homes and buildings. The proposed code revision reflects broad changes in technology, building materials, and best practices, while considering Honolulu's unique island and building environment.

In addition, this measure would ensure that new homes come equipped with either solar or high-efficiency water heaters, helping to close the loophole that has allowed thousands of gas water heaters to be installed in recent housing.

Finally, Bill 25 helps Honolulu make the transition to zero emission vehicles by requiring that a certain percentage of new parking stalls be "EV-ready" (with wiring and capacity for EV chargers to be installed in the future). This will help to make electric vehicles more accessible to residents and reduce the overall cost of our transition to clean transportation. This provision should be strengthened, however, by requiring Level 2 charging capacity in all new parking stalls (for commercial and multi-family buildings), as Vancouver and other cities have done. This will help to "future-proof" new construction and accelerate our clean transportation future.

Mahalo for considering my testimony in support of Bill 25.

I agree to the above recommendations..
Mary Jane Ululani Young 1547 St. Louis Hts. 96816

From: CLK Council Info
Sent: Tuesday, July 23, 2019 8:09 PM
Subject: Business, Economic Development and Tourism Speaker Registration/Testimony

Speaker Registration/Testimony

Name	Eda Rassner
Phone	808-775.0601
Email	erassner@icloud.com
Meeting Date	07-23-2019
Council/PH Committee	Business
Agenda Item	EVready
Your position on the matter	Support
Representing	Self
Organization	
Do you wish to speak at the hearing?	No
Written Testimony	
Testimony Attachment	
Accept Terms and Agreement	1

From: CLK Council Info
Sent: Wednesday, July 24, 2019 7:06 AM
Subject: Public Safety and Welfare Speaker Registration/testimony

Speaker Registration/Testimony

Name	Stewart Wiggers
Phone	8089464143
Email	Wiggers@hawaii.edu
Meeting Date	07-25-2019
Council/PH Committee	PublicSafety
Agenda Item	Bill 25
Your position on the matter	Support
Representing	Self
Organization	
Do you wish to speak at the hearing?	No
Written Testimony	Clean energy will help solve our desperate climate change problem.
Testimony Attachment	
Accept Terms and Agreement	1

From: CLK Council Info
Sent: Wednesday, July 24, 2019 6:36 AM
Subject: Public Infrastructure, Technology and Sustainability Speaker Registration/testimony

Speaker Registration/Testimony

Name Helene Spencer
Phone 808 896-4585
Email helenespencer13@gmail.com

Meeting Date 07-24-2019

Council/PH
Committee PITS

Agenda Item Bill 25 2019

Your position on
the matter Support

Representing
Organization Self

Do you wish to
speak at the
hearing? No

Written
Testimony It seems once again that our government continues to be on the side of big business ex. Hawaiian Electric and against the people of Hawaii. It does not make any sense to me why you wouldn't allow all who would like to convert to solar to be able to do so. Less impact on OUR personal pockets as well our environment. Let's be real and do the right thing

Testimony
Attachment

Accept Terms
and Agreement 1

From: CLK Council Info
Sent: Tuesday, July 23, 2019 8:27 PM
Subject: Council/Public Hearing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Chris Barzman
Phone 6199175925
Email chrisbarzman@yahoo.com
Meeting Date 07-25-2019
Council/PH Committee Council
Agenda Item Bill 25
Your position on the matter Support
Representing Organization Self
Do you wish to speak at the hearing? No

Honolulu City Council
Zoning, Planning and Housing Committee
Support for Bill 25, "Relating to the Adoption of the State Energy Conservation Code"
July 25, 2019, 9:00 AM hearing

Aloha Chair Menor, Vice Chair Waters, and members of the Committee,

I am testifying in strong support of Bill 25, "Relating to the Adoption of the State Energy Conservation Code."

Written Testimony

This is a critical clean energy and climate measure that would modernize the City & County of Honolulu's (Honolulu's) building energy code. This modernization updates Honolulu's existing building energy code—which is over thirteen years out of date—to increase occupant health and comfort while significantly reducing energy use for new homes and buildings. The proposed code revision reflects broad changes in technology, building materials, and best practices, while considering Honolulu's unique island and building environment.

In addition, this measure would ensure that new homes come equipped with either solar or high-efficiency water heaters, helping to close the loophole that has allowed thousands of fossil gas water heaters to be installed in recent housing.

Finally, Bill 25 helps Honolulu make the transition to zero emission vehicles by requiring that a certain percentage of new parking stalls be "EV-ready" (with wiring and capacity for EV chargers to be installed). This will help to make electric vehicles more accessible to residents and reduce the overall cost of our transition to clean transportation. This provision should be strengthened, however, by requiring Level 2 charging capacity in all new parking stalls (for commercial and multi-family buildings), as Vancouver and other cities have done. This will help to "future-proof" new construction and accelerate our clean transportation future.

Please advance Bill 25 with this EV-ready amendment.

Thank you for considering my testimony.

Chris Barzman
1710 Makiki St #PH2
Honolulu, HI 96822

Testimony
Attachment
Accept Terms
and Agreement

1

From: CLK Council Info
Sent: Tuesday, July 23, 2019 10:26 PM
Subject: Council/Public Hearing Speaker Registration/Testimony

Speaker Registration/Testimony

Name	Jeff Lum
Phone	8083860183
Email	jeff@visit-hawaii.com
Meeting Date	07-25-2019
Council/PH Committee	Council
Agenda Item	Bill 25
Your position on the matter	Support
Representing	Self
Organization	
Do you wish to speak at the hearing?	No
Written Testimony	I STRONGLY SUPPORTS BILL 25 and ask the council to adopt this ordinance.
Testimony Attachment	
Accept Terms and Agreement	1

From: CLK Council Info
Sent: Wednesday, July 24, 2019 2:16 AM
Subject: Council/Public Hearing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Noenoe Barney-Campbell
Phone 8083829004
Email noenoebc@yahoo.com
Meeting Date 07-24-2019
Council/PH Committee Council
Agenda Item Bill 25
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No

Written Testimony I support bill 25. We must look to the future and plan now for climate change or be consumed by it. We are surrounded by the ocean which is warming up and rising. As the saying goes—nature bats last. We are risking our future if we do nothing.

Testimony Attachment

Accept Terms and Agreement 1

From: CLK Council Info
Sent: Tuesday, July 23, 2019 11:43 PM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name michael krijnen
Phone 8084922224
Email architects911@gmail.com
Meeting Date 07-23-2019
Council/PH Committee Zoning
Agenda Item Bill 256
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? Yes

Written
Testimony

Unless the the proper incentives and technical requirements that will allow the population to use the technology without too much cost or inconvenience it will not succeed. not voting for success makes the Islands losers in the race to implement the technology seen as the only way we can achieve the goal set by the Governor and morally deal with the oncoming disaster of too much CO2 in the atmosphere.

Testimony
Attachment

Accept Terms and Agreement 1

From: CLK Council Info
Sent: Tuesday, July 23, 2019 8:16 PM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Holly Algood
Phone 8085570354
Email holly@algoodhi.com
Meeting Date 07-25-2019
Council/PH Committee Zoning
Agenda Item Item 7
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? Yes

To: The Committee on Zoning, Planning and Housing
From: Holly Algood
Date: Thursday, Jul 23, 2019

In strong support of Bill 25

Dear ZPH Chair Menor and Committee Members,

Written
Testimony

I strongly support Bill 25. I have been an owner of an electric car for the last three years. I love my electric car. It saves me time about 12 hours a year or one full waking day. It saves me money - over \$1,000 a year, and it makes me happy. I charge my car at home and we have solar panels. I am very experienced with electric car charging and previously installed and owned the only public charging station on the north tip of the island. I ask you to change all the bill's language about Level 1 charging to be Level 2 charging. Level 2 is several times faster and infinitely more convenient. Level one is predicted to be outdated soon. Many if not most of the newer public installations are level 3.

The youth is so behind the electric car revolution. Recently I drove my electric car in the Independence day parade in Kona as part of the Big Island Electric Vehicle Association contingent. I was touched as I drove thru people-lined streets from Old Airport to Huggo's to hear children call out, "that's the car I want when I grow up" and people applauded me. The youth knows that is where cars in the future need to be.

Other parts of this bill will make strategic choices for solar water heating and multi-family dwellings. It will ease costs of living in the long term and contribute to a cleaner and healthier Hawaii. Solar hot water is a no-brainer. I've had solar hot water at the last two homes I've owned and I would never go back. After the initial cost is paid - hot water is basically free and saves you money usually the older you get.

Requiring level 2 chargers be installed in multi-occupancy projects makes it so much more convenient to choose electric cars which don't produce the awful toxins and noise pollution in the air that gasoline vehicles do. Electric vehicles are clean, quiet and FUN. I see so many electric car owner smile more than other car owners which is a much healthier and happier state of being.

These things will help us reduce the dangers of the climate crisis. When we asked our 14 year old son what he feared most, his answer was "climate change". Our children deserve the healthiest, happiest place we can give them. This bill will move us in the right direction. Please do the right thing at the right time in the right place and pass this bill.

With aloha,
Holly Algood
808-557-0354
Hawi, HI 96719

Testimony
Attachment

Accept Terms and Agreement 1

From: CLK Council Info
Sent: Tuesday, July 23, 2019 10:11 PM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Christopher Dean
Phone 8088895862
Email topherdean1@gmail.com
Meeting Date 07-25-2019
Council/PH Committee Zoning
Agenda Item 7
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? Yes

Solving The Climate Crisis

Written
Testimony

The fastest way to transition to Solar energy is to disrupt the current capital model. Currently, capitalism takes from the many and funnels it up to the few. The problem with this model is, it puts the burden of the transition on only a few people, many of whom don't even want the burden and are quite happy with the status quo. Current electric utilities are fighting to maintain control over the energy distribution network. They are trying to upscale to solar and other forms of sustainable energy by creating solar and wind farms. It takes a lot of capital to build these farms and then to insert the energy into the grid. Corporations hate to spend their capital, especially when they're making plenty of money with their current infrastructure. Unfortunately, the current infrastructure is causing a mass extinction event and we're out of time to change it. The only reason any energy providers are spending capital building solar and wind farms is because they're afraid that if they don't, they'll be left behind by people like Elon Musk, but they're still clinging to their old model, it's worked so well for them for so long.

My Grandfather was Executive Vice President of Consolidated Edison, the largest electric utility in New York City. He was prescient in his job and fought hard to convince the rest of the executives to spend capital on putting their electric lines underground. They resisted his logic to move the tangled mass of overhead electric lines underground until finally, a massive blizzard buried the city and brought down almost the entire grid. Soon after that, they saw that my Grandfather had been right all along and now Con Ed has over 96,000 miles of underground cables. This move saved the company millions of dollars over the long run and prevented an untold amount of losses to the city of New York. Had they not moved the cables underground, the losses to businesses, including the New York Stock

Exchange, would have been massive, crippling the entire U.S. economy.

Ten years ago, I called a senior executive at Con Ed to warn them that global warming is real and that the consequences are dire and coming soon. I was able to speak to the man by dropping my Grandfather's name, but after explaining the seriousness of the consequences they were facing and that they were in large part, responsible for this looming disaster, I got a taste of what my Grandfather must have experienced during his tenure at the company, dismissed as an alarmist. Shortly after that, Hurricane Sandy engulfed lower Manhattan and swamped the subways and other boroughs. It was an unprecedented incident and opened the eyes of Con Ed executives. Now they are spending billions of dollars in developing alternative energy sources, 8% of which is from solar energy. They actually pay customers to charge their electric cars during off peak hours.

Now it's your turn and I implore you to listen to me. Please do not wait for this disaster to hit before you take me seriously. If you do, all hope will be lost. The climate crisis has a momentum that is so massive, it has no parallel. Even swift action today will not save us from the unimaginable pain and suffering we're about to experience, indeed, that we have already begun to experience. My only hope now is to mitigate that pain and suffering the best that I can. Make no mistake about this, we are the ones who are going to experience this horror, not our children. What our children will suffer is beyond comprehension, but you yourself will live to see the full magnitude of humanities inaction on this crisis. Fifty percent of the world's coral reefs are dead. Fifty percent of Hawaii's reefs died three years ago with two months of 90 degree weather in August and September. I was surfing for two hours when I realized I was miserably hot, the water was not cooling me off. You must have noticed that temperatures this summer have been the hottest ever. We've had more than two months straight of 90 plus degree temperatures with August and September yet to come. I'm living in fear that Hawaii will lose the rest of its coral reefs this summer and the bleaching is already occurring.

"Come with me if you want to live." Step 1. Bring back net metering. HELCO and it's subsidiaries must not only bring back net metering, but they must pay their customers for the excess energy they create. The reason we're in the middle of the biggest mass extinction event in 30 million years is because of our fraudulent accounting. Not taking into consideration the economic effects of industry on the environment is criminal, it's like running a business and not putting your labor costs in your liability column. Oh, the numbers will look great, what a profit you're making, but at the end of the year, you'll be wondering why your profits are so low. It's because you never factored in your labor costs. Well, not factoring in the cost of environmental degradation is now coming back to bite us in the throat. I mention this, because when customers who make electricity at home, or at their businesses, get paid for their excess electricity, the true cost of burning fossil fuel will have to be calculated for a fair market rate. Add up the hundreds of billions of dollars we spend annually in disaster relief and lost income due to climate change. Now factor in the 21 trillion dollars we've spent on military expenditures invading the Middle East to access their oil. We don't have to crunch the numbers right now, but I think you can already see, that the price for excess solar electricity is going to be much, much cheaper than the cost of oil.

HELCO complained of "grid saturation" and stopped net metering, but they didn't need to stop net metering, they only needed to spend more capital on upgrading the grid to handle the influx of solar energy. But for reasons I outlined in my opening paragraph, they chose to just take our electricity and not pay us for it. They tried to claim it wasn't fair to their customers who don't have solar. Well, welcome to capitalism, adapt or lose. There are winners and losers in capitalism and if you don't put solar on your roof, then you're a fool. You either join everyone else in making their own electricity, or you suffer the pain of not adapting. Fortunately, solar energy is the cheapest source of energy on the market today.

With Federal and State subsidies to help homeowners and businesses install solar on their roofs, soon the cost of electricity will drop for even businesses who are not able to meet their own energy demand.

Why is this plan necessary? According to Harvard Professor James Anderson, the man who saved us from the chlorofluorocarbon disaster, we have five years to turn this around or we're doomed. Apparently, it seems people would rather die in a burning hell fire than spend money, but what if you change that narrative from; transitioning from fossil fuels to solar will cost you money to; transitioning from fossil fuels to solar will MAKE you money. Not only will you have free electricity when you install solar panels on your roof, but you'll be able to make money from the excess energy you create. This will drive the market. If you thought the solar industry was booming ten years ago, wait until you see what happens when people find out they can make supplemental passive income. Nothing motivates people like making money without working and that's what solar energy can do for us, for you, for everyone. Truthfully, I can't think of an operation in Hawaii that won't be able to make all their own electricity, but for those who can't or won't, they'll have to pay the rest of us for the electricity we make. Of course, we'll have to explain that the money they'll be saving in taxes from not having to invade other countries, will be used to pay for electricity. After all, the more money people make per kilowatt hour, the more motivated they'll be to install as much solar as they possibly can.

Testimony

Attachment

Accept Terms and
Agreement 1

COMMITTEE: Zoning, Planning and Housing Committee July 25, 2019

RE: Bill 25

POSITION: Strong support

Aloha Chair Menor, Vice Chair Waters and members of the Committee

Back in 2010-2011 I served on the City and County of Honolulu Sustainable Building Task Force. A number of members of the task force wanted to amend the code to require a conduit from the roof to the electrical panel on all new homes, to make those homes "PV ready" – to make it easier and cheaper for a new owner to install solar panels. Representatives of the building industry shot down the idea, saying that house prices were already too expensive, even though the sum involved to run the conduit was derisory. A colleague of mine who works in the rooftop solar business in Hawaii says that decision has already cost homeowners in Hawaii millions of dollars.

I know for a fact that the amount of money involved to make a new house PV and EV ready is very little or nothing. I know because I rebuilt my own house and when I asked my electrician to run the conduit for the PV and for a 240 volt outlet, I asked him how much it would add to the price and he said "Maybe a couple of bucks for the plastic conduit." This requirement is not onerous or expensive. Indeed, I urge you to increase the EV- ready requirement by requiring 240 volt outlets, which would make possible the much more functional Level 2 chargers.

Do we need to rehearse why it is so urgent to start taking simple measures such as these, wherever we can, to reduce our carbon footprint? We are rapidly sliding towards climate catastrophe. Every preventive measure we take helps. Those who will suffer most from climate change in our communities and overseas, will be the poor. A policy of being penny-wise now will look pound-foolish in just a few short years.

Bill 25 is not perfect, but it is a good first step. I urge you to pass it out to the Council for second reading.

Mahalo for your consideration,

Anthony Aalto

To: The Committee on Zoning, Planning and Housing
From: Alan Stockton
Date: 25 July 2019

Aloha, Chair Menor and members of the Committee

I am in strong support of Bill 25, with one modification that I will mention below. Last year's IPCC report emphasized that to have any hope of keeping the temperature rise below 1.5 C by the end of this century, CO₂ emissions have to peak no later than the end of next year. There is an urgency in addressing this issue. As Bill McKibben is fond of saying, winning slowly is the same thing as losing.

This Bill will help close the loophole that has allowed the installation of thousands of gas or electric water heaters in new homes instead of using the free solar energy that Hawaii has in abundance. Natural gas is sometimes touted as a relatively clean fuel, but, when the effect of methane leakage in production and transport is taken into account, as well as the energy required to liquify it for transport to Hawaii, several studies have estimated that its effect on the climate crisis is as bad as burning coal.

Within a very short time, electric vehicles (EVs) will be similar in price to equivalent internal combustion engine models. On an island the size of Oahu, current EV models can make any likely series of trips in a day on a single charge. The main impediment to the widespread adoption of EVs will be convenience of charging, particularly for condo and apartment dwellers. But for most people, it will be essential that the charging be Level 2 instead of Level 1, so that a full charge can be obtained over an 8-hour period or less. And it would be best if at least the infrastructure is present in any new condo or other commercial building to easily expand Level 2 charging to *all* of the parking spaces. The changeover to EVs is likely to happen much quicker than most people imagine.

Thirty years ago, a world leader addressed the U.N. on climate change for the first time, including these words: "It is life itself — human life, the innumerable species of our planet — that we wantonly destroy. It is life itself that we must battle to preserveThe danger of global warming is as yet unseen but real enough for us to make changes and sacrifices so we may not live at the expense of future generations....We should always remember that free markets are a means to an end. They would defeat their object if by their output they did more damage to the quality of life through pollution than the well-being they achieve by the production of goods and services....No generation has a freehold on the earth; all we have is a life tenancy with a full repairing lease."

This moral argument was made by Margaret Thatcher; she may have been a conservative, but she was trained as a scientist and could understand the portents for the future, that are now being realized. In a larger sense, this is not a liberal issue or a conservative issue, but a human issue: we have to make decisions now that will minimize the degradation of the Earth that we will hand off to our children and grandchildren. We have already defaulted on our "full repairing lease," but we have an obligation at least to do everything we can to contain and lessen the future damage.

I urge you to adopt this Bill, with the modifications for EV charging I have described.

Mahalo for allowing me to testify.

From: CLK Council Info
Sent: Wednesday, July 24, 2019 7:52 AM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Roberta Baker
Phone 808 217-7005
Email randr@hawaii.rr.com
Meeting Date 07-24-2019
Council/PH Committee Zoning
Agenda Item Bill 25
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No

Dear ZPH Chair Menor and Committee Members,

I support Bill 25.

I own a fully electric car (Kia Soul EV). I charge at home using a Level 2 (240volt) charger. The reasons, outlined below, for mandating Level 2 vs. Level 1 are very apparent and valid in my experience.

For the reasons below, I ask you to change all the bill's language about Level 1 charging to be Level 2 charging. I understand that Level 2 is fast becoming the standard nationwide, because it is several times faster, making EVs far more convenient and practical for homeowners and renters in a wide variety of situations. "Range anxiety" (fear one's battery won't last to the next charging station) should not prevent people from switching to an EV, which nearly everyone in Hawaii must eventually do.

Written
Testimony

Items 17, 28 and 31 in Bill 25--the solar water heating and EV-readiness parts--will do three important things:

1. Lower the cost of living for long-term Hawaii residents. Paying a permanent monthly bill for natural gas to heat water in sunny Hawaii is just silly. Solar water heating pays for itself in three or four years, and residents don't have a monthly gas bill. Ever. An electric water heater accounts for over 25% of the average electric bill. The sun is free. Electric vehicles (EVs) will replace gas cars in the near future. Hawaii residents will need some way to charge at home. How will they afford to install the electrical equipment needed

for that? Installing it is far less expensive during construction. Don't force new homeowners to spend thousands of dollars to retrofit their homes for the EV they will be driving within the next decade or two.

2. Help to fight our climate crisis. Those who want a choice of gas water heating should consider that the methane they would burn affects all of us. Their kokua is not just appreciated, it's essential.

Hawaii needs to adopt EVs widely and quickly if we hope to meet our clean energy goals. The top two reasons people don't buy an EV right now are range anxiety, and too few charging stations in general [1]. Remove these barriers, and people will adopt. Cutting our greenhouse gas emissions depends on it.

3. Show some leadership! We're all very proud to be the first state to commit to 100% clean energy, but how will we get there? The Federal government is in love with coal. The Hawaii legislature did very close to nothing this year.

That leaves you. Are we all waiting for a giant hurricane to wipe out Waikiki? Are you waiting for Kam Highway to fall into the ocean completely? We know now that clean energy by 2045 is too little, too late, and it's past time to move the goal up. Way up.

You, and state lawmakers, are supposed to write laws to help protect us from sea level rise, catastrophic hurricanes, and rain bombs. This bill, and stronger amendments, deserve support from anyone with the least concern about climate change, or about saving consumers money.

Here's your chance to set an example. Take it!

[1] <https://www.media.volvocars.com/us/en-us/media/pressreleases/248305/poll-finds-americans-feel-electric-vehicles-are-the-future-of-driving>

Thank you for the opportunity to testify,
Roberta Baker.

Testimony

Attachment

Accept Terms
and Agreement

1

From: CLK Council Info
Sent: Tuesday, July 23, 2019 7:33 PM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Mishka K Sulva
Phone 8083529472
Email Mishkaks@gmail.com
Meeting Date 07-24-2019
Council/PH Committee Zoning
Agenda Item 7
Your position on the matter Support
Representing Self
Organization Mishka
Do you wish to speak at the hearing? No

Solar water heaters pay for their upfront costs in 4 to 5 years, after which you will *never* get a gas or electric bill for them. It is a basic, practical and necessary component in combating climate change. It's common sense,--it's good for the environment and good for the consumer.

Written Testimony In regards to EV charging availability, we must plan for the future and that future includes more families living in denser housing. It is no longer feasible for working families to buy their own single family homes and install these kind of chargers. It is much more prohibitive for renters or condominium owners to install these kind of chargers--per the city Office of Climate Change, installing these during construction costs \$920 per stall; retrofitting is \$10,273 per stall. Thus, we must make sure that renters and condominium owners have the means to charge their electric vehicles as well as home owners.

Testimony Attachment

Accept Terms and Agreement 1

From: CLK Council Info
Sent: Tuesday, July 23, 2019 7:25 PM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Ted Bohlen
Phone 808 294-3689
Email Tbohl8@yahoo.com
Meeting Date 07-24-2019
Council/PH Committee Zoning
Agenda Item Bill 25
Your position on the matter Support
Representing Self
Organization

Do you wish to speak at the hearing? No

Written Testimony

I ask the Council to pass Bill 25. I want to buy an electric vehicle and install solar PV to charge an electric vehicle and hot water, but need Bill 25 and its Level 2 charging to do so. Bill 25 will help Oahu residents protect the environment and respond to the climate crisis by displaying oil-based power and gasoline. Oahu present and future voters will appreciate your vote for Bill 25.

Testimony Attachment

Accept Terms and Agreement 1

From: CLK Council Info
Sent: Tuesday, July 23, 2019 7:14 PM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Eric Micha'el Leventhal
Phone (808) 442-2353
Email emleventhal808@gmail.com
Meeting Date 07-25-2019
Council/PH Committee Zoning
Agenda Item 7
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No

Dear ZPH Chair Menor and Committce Members,

In recent years, many bills in the state legislature have attempted to expand the infrastructure required for wider adoption of electric vehicles (EVs). Nearly all have failed.

Similarly, bills to enforce the 2010 law requiring solar water heating on every new Hawaii home have failed.

Both of these efforts are crucial pieces in our struggle to make the State zero-emission as soon as possible, and do our part to fight climate change, by far the most urgent issue of our time. The bill before you would codify very modest advances in these two areas, as a small step toward fighting the climate crisis.

Written
Testimony

I ask you to change all the bill's language about Level 1 charging to be Level 2 charging. I understand that Level 2 is fast becoming the standard nationwide, because it is several times faster, making EVs far more convenient and practical for homeowners and renters in a wide variety of situations. "Range anxiety" should not prevent people from switching to an EV, which nearly everyone in Hawaii must eventually do, if we are to meet the clean energy goals we are rightly so proud of.

Bolder steps, such as requiring PV on all new buildings and more widespread Level 2 EV charging readiness, should be our goal. But this bill is an important step. AC Level 1 or 2 charger readiness for 25% of new parking stalls, and 90% zero-emission energy water heating on residential buildings, are minimal requirements that should be supported by

anyone with the least concern about the climate crisis, or about saving consumers money.

Please actively support Bill 25 and take a step toward a more livable Earth.

Thank you for the opportunity to testify.

Eric Micha'el Leventhal

Testimony

Attachment

Accept Terms
and Agreement

1

From: CLK Council Info
Sent: Tuesday, July 23, 2019 8:07 PM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Peter Gellatly
Phone 8085428880
Email pgellatly@mac.com
Meeting Date 07-25-2019
Council/PH Committee Zoning
Agenda Item 7 — Bill 25 (2019)
Your position on the matter Support
Representing Self
Organization

Do you wish to speak at the hearing? No

Written Testimony

President Trump's abdication of his responsibilities regarding climate change has passed the ever-hotter torch to us, which is where it belongs. We need to do whatever is possible to literally save humanity, and I am deeply grateful that you are addressing this issue. If possible, please place greater emphasis on Level 2 EV charging. That's where the big difference can be made. As always, mahalo!

Testimony Attachment

Accept Terms and Agreement 1

From: CLK Council Info
Sent: Tuesday, July 23, 2019 7:57 PM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Gerlinde Morris
Phone 808-934-7410
Email gerlinde@hawaii.edu
Meeting Date 07-25-2019
Council/PH Committee Zoning
Agenda Item Bill 25
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No

Honolulu City Council
Zoning, Planning and Housing Committee
Support for Bill 25, "Relating to the Adoption of the State Energy Conservation Code"
July 25, 2019, 9:00 AM hearing

Aloha Chair Menor, Vice Chair Waters, and members of the Committee,

I am testifying in strong support of Bill 25, "Relating to the Adoption of the State Energy Conservation Code."

Written Testimony

This is a critical clean energy and climate measure that would modernize the City & County of Honolulu's building energy code. This modernization updates Honolulu's existing building energy code—which is over thirteen years out of date—to increase occupant health and comfort while significantly reducing energy use for new homes and buildings. The proposed code revision reflects broad changes in technology, building materials, and best practices, while considering Honolulu's unique island and building environment.

In addition, this measure would ensure that new homes come equipped with either solar or high-efficiency water heaters, helping to close the loophole that has allowed thousands of gas water heaters to be installed in recent housing.

Finally, Bill 25 helps Honolulu make the transition to zero emission vehicles by requiring that a certain percentage of new parking stalls be "EV-ready" (with wiring and capacity for EV chargers to be installed in the future). This will help to make electric vehicles more

accessible to residents and reduce the overall cost of our transition to clean transportation. This provision should be strengthened, however, by requiring Level 2 charging capacity in all new parking stalls (for commercial and multi-family buildings), as Vancouver and other cities have done. This will help to “future-proof” new construction and accelerate our clean transportation future.

Mahalo for considering my testimony in support of Bill 25.

Gerlinde Morris

Testimony
Attachment

Accept Terms and Agreement 1

From: CLK Council Info
Sent: Tuesday, July 23, 2019 11:47 PM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name	Daniel C Smith
Phone	8084628346
Email	dancsmith@rocketmail.com
Meeting Date	07-24-2019
Council/PH Committee	Zoning
Agenda Item	Bill 25
Your position on the matter	Support
Representing	Self
Organization	
Do you wish to speak at the hearing?	No
Written Testimony	Good Bill.
Testimony Attachment	
Accept Terms and Agreement	1

From: CLK Council Info
Sent: Wednesday, July 24, 2019 12:58 AM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Ted Banta
Phone 8089658084
Email spookypie@gmail.com
Meeting Date 07-24-2019
Council/PH Committee Zoning
Agenda Item Bill 25
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No

To: The Committee on Zoning, Planning and Housing
From: Theodore Banta / Miriam Jacobson
Date: Thursday, Jul 25, 2019

In strong support of Bill 25

Dear ZPH Chair Menor and Committee Members,

Written
Testimony

I support Bill 25. For the reasons below, I ask you to change all the bill's language about Level 1 charging to be Level 2 charging. I understand that Level 2 is fast becoming the standard nationwide, because it is several times faster, making EVs far more convenient and practical for homeowners and renters in a wide variety of situations. "Range anxiety" (fear one's battery won't last to the next charging station) should not prevent people from switching to an EV, which nearly everyone in Hawaii must eventually do.

Items 17, 28 and 31 in Bill 25--the solar water heating and EV-readiness parts--will do three important things:

1. Lower the cost of living for long-term Hawaii residents. Paying a permanent monthly bill for natural gas to heat water in sunny Hawaii is just silly. Solar water heating pays for itself in three or four years, and residents don't have a monthly gas bill. Ever. An electric water heater accounts for over 25% of the average electric bill. The sun is free. Electric vehicles (EVs) will replace gas cars in the near future. Hawaii residents will need

some way to charge at home. How will they afford to install the electrical equipment needed for that? Installing it is far less expensive during construction. Don't force new homeowners to spend thousands of dollars to retrofit their homes for the EV they will be driving within the next decade or two.

2. Help to fight our climate crisis. Those who want a choice of gas water heating should consider that the methane they would burn affects all of us. Their kokua is not just appreciated, it's essential.

Hawaii needs to adopt EVs widely and quickly if we hope to meet our clean energy goals. The top two reasons people don't buy an EV right now are range anxiety, and too few charging stations in general [1]. Remove these barriers, and people will adopt. Cutting our greenhouse gas emissions depends on it.

3. Show some leadership! We're all very proud to be the first state to commit to 100% clean energy, but how will we get there? The Federal government is in love with coal. The Hawaii legislature did very close to nothing this year.

That leaves you. Are we all waiting for a giant hurricane to wipe out Waikiki? Are you waiting for Kam Highway to fall into the ocean completely? We know now that clean energy by 2045 is too little, too late, and it's past time to move the goal up. Way up.

You, and state lawmakers, are supposed to write laws to help protect us from sea level rise, catastrophic hurricanes, and rain bombs. This bill, and stronger amendments, deserve support from anyone with the least concern about climate change, or about saving consumers money.

Here's your chance to set an example. Take it!

[1] <https://www.media.volvocars.com/us/en-us/media/pressreleases/248305/poll-finds-americans-feel-electric-vehicles-are-the-future-of-driving>

Thank you for the opportunity to testify.

Theodore Banta and Miriam Jacobson

Testimony
Attachment

Accept Terms
and Agreement

1

From: CLK Council Info
Sent: Wednesday, July 24, 2019 2:39 AM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Rebecca salwin
Phone 240-620-4197
Email Becca.Salwin@gmail.com
Meeting Date 07-24-2019
Council/PH Committee Zoning
Agenda Item 7
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No

Dear committee members-

I support this bill to help combat climate change and rising energy costs for our residents and commuters. But I also urge that all EV charger-language be changed to level 2 chargers.

Written
Testimony

Buildings should have renewable energy requirements for water heaters, and they should offer Level 2 EV charging. But we know that the building owners won't all make these changes without leadership from our elected officials. Let's make Honolulu a leader and an example to the rest of the state, for realistic solutions to help out our people and our planet.

However, I also urge the committee to change the requirements for level 1 chargers to level 2 chargers-- it might seem like a small thing but it means charging an EV car in hours instead of days. Without this, people will be afraid to buy these cars as quickly, and once they do, will start having to spend their own money to upgrade chargers.

Testimony
Attachment

Accept Terms and Agreement 1

From: CLK Council Info
Sent: Wednesday, July 24, 2019 7:11 AM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name	Stewart Wiggers
Phone	8089464143
Email	Wiggers@hawaii.edu
Meeting Date	07-25-2019
Council/PH Committee	Zoning
Agenda Item	Bill 25
Your position on the matter	Support
Representing	Self
Organization	
Do you wish to speak at the hearing?	No
Written Testimony	Passing this bill will go a long way in helping to combat climate change and keep our future bright for our Keikis!
Testimony Attachment	
Accept Terms and Agreement	1

From: CLK Council Info
Sent: Wednesday, July 24, 2019 5:58 AM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Sara Lynn Hoerlein
Phone 7209877074
Email sara.hoerlein@gmail.com
Meeting Date 07-24-2019
Council/PH Committee Zoning
Agenda Item 7
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No

Dear ZPH Chair Menor and Committee Members,

I wholeheartedly support Bill 25, BUT with a change to the bill's language concerning charging. The anecdotal and evidence based data overwhelmingly support a Level 2 charging requirement over the current language describing Level 1 charging apparatus in new construction. Level 2 is way faster, making EVs far more convenient and practical for homeowners and renters in a wide variety of situations. "Range anxiety" (fear one's battery won't last to the next charging station) should not prevent people from switching to an EV, which nearly everyone in Hawaii must eventually do.

Written
Testimony

We live on islands! We must not be dependent on dangerous and costly fossil fuels. They will be the ultimate cause of the islands becoming unlivable.

Long term Hawaiian residents are being priced out of life in Hawaii. Lowering the cost of living by making an EV car convenient and reliable, and eliminating monthly electric, gas, and water bills, can help mitigate this.

It ALWAYS makes sense to plan for the future and be proactive not reactive, and install the best choice charging equipment, rather than try to upgrade later because the 'cheap' choice was made instead of the 'smart' choice. As EV's become the standard not the exception, requiring new construction to have the most reliable charging available is less expensive in the long run, and will support the eventual majority of EV type vehicles.

Removing the barriers to EV ownership, range anxiety and lack of charging stations, helps

to fight our CLIMATE CRISIS.

We are PROUD to be the first state to commit to 100% clean energy, but we must DO the things that will get us there. That means that social change and personal choices, must work in concert with LEGISLATION to make this happen. Setting lofty goals and failing to take the necessary steps to make them happen degrades integrity and this is reflected in voting choices. At the snail pace we are moving toward this goal, we will be under water, destroyed by a bomb hurricane, or unable to make a living or eat from the ocean. YOU, and state lawmakers, are supposed to write laws to help protect us from sea level rise, catastrophic hurricanes, and flooding. HELP US PLEASE! We can not do this without the state government.

Thank you for the opportunity to testify.
Sara Hoerlein

Testimony
Attachment

Accept Terms and
Agreement 1

From: CLK Council Info
Sent: Wednesday, July 24, 2019 7:24 AM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Bill Bugbee
Phone 8083397593
Email bbugbee@no2oil.org
Meeting Date 07-25-2019
Council/PH Committee Zoning
Agenda Item Bill 25
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No

Bill 25 now before the City Council seeks to address some of the fundamental changes Hawaii must undertake in addressing Climate Change and the economic, social, and environmental impacts on Hawaii, not just Honolulu.

Hawaii currently has over one million gasoline and diesel-powered vehicles on its roads, which, according to state research, emit nearly five million metric tons of climate-changing carbon pollution annually throughout the islands. Add to that — Hawaii residents, businesses, and visitors 5 spent over \$1,500,000,000 (\$1.5 Billion) on imported fossil fuel purchases in 2018, dollars which otherwise could be spent to support our island economy.

Written Testimony Electric Vehicles (Battery Electric Vehicles aka BEV) will play a primary and enabling role in Hawaii's journey to achieving its statewide goal of a 100% clean (and home-grown) energy economy by 2045.

The City of Honolulu, our various county governments, communities, developers, along with present and future EV owners struggle with the basic question of where do I charge my EV?

The intent of Bill 25 is clear, advance the adoption of electric vehicles within the City of Honolulu. In order for Bill 25 to be effective, the city council must amend the Bill's Level 1 charger provision to better reflect the basic EV charging needs of the public -- and to the minimum Level 2 class chargers (the current public charger standard).

Level 2 chargers require no special wiring or installation considerations beyond that which

applies to a clothes dryer, and they have drop significantly in price since their general introduction over 7 years ago. Studies have also shown that installing an EV charger at the time of construction can be 91% less expensive than post-construction retrofits.

Hawaii's fossil-fueled transportation options carry with them not only passengers, but externality costs for Hawaii's taxpayers, primarily in the form of economic and environmental costs created by worsening and growing impacts and costs of climate change on Hawaii, its island economy, and the new climate reality we all face – Bill 25 is a good initial step in addressing today's climate challenges.

Sincerely,
Bill Bugbee
electric vehicle owner
North Kona, 96740

Testimony
Attachment
Accept Terms and Agreement 1

From: CLK Council Info
Sent: Tuesday, July 23, 2019 10:19 PM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name	John David Grandinetti
Phone	8087373536
Email	grandsolar808@gmail.com
Meeting Date	07-25-2019
Council/PH Committee	Zoning
Agenda Item	Bill 25
Your position on the matter	Support
Representing	Self
Organization	
Do you wish to speak at the hearing?	No
Written Testimony	Please take action to reduce greenhouse gas emissions.
Testimony Attachment	
Accept Terms and Agreement	1

From: CLK Council Info
Sent: Wednesday, July 24, 2019 7:44 AM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Victoria Anderson
Phone 8083679296
Email vanderso@hawaii.edu
Meeting Date 07-25-2019
Council/PH Committee Zoning
Agenda Item Bill 25 (2019)
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No
Written Testimony Please be as pono as you can for the planet, which is undergoing climate collapse!
Please change all language referring to Level 1 chargers (110 volts) to Level 2 (220 volts), and pass this bill!
Mahalo nui loa
Testimony Attachment
Accept Terms and Agreement 1

From: CLK Council Info
Sent: Wednesday, July 24, 2019 7:49 AM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Greg Puppione
Phone 8089453455
Email gpuppione@gmail.com
Meeting Date 07-25-2019
Council/PH Committee Zoning
Agenda Item Bill 25
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No

Aloha Chair Menor, Vice Chair Waters, and members of the Committee,

I am testifying in strong support of Bill 25, "Relating to the Adoption of the State Energy Conservation Code."

This is a critical clean energy and climate measure that would modernize the City & County of Honolulu's building energy code. This modernization updates Honolulu's existing building energy code—which is over thirteen years out of date—to increase occupant health and comfort while significantly reducing energy use for new homes and buildings. The proposed code revision reflects broad changes in technology, building materials, and best practices, while considering Honolulu's unique island and building environment.

Written
Testimony

In addition, this measure would ensure that new homes come equipped with either solar or high-efficiency water heaters (preferably both), helping to close the loophole that has allowed thousands of gas water heaters to be installed in recent housing.

Finally, Bill 25 helps Honolulu make the transition to zero emission vehicles by requiring that a certain percentage of new parking stalls be "EV-ready" (with wiring and capacity for EV chargers to be installed in the future). This will help to make electric vehicles more accessible to residents and reduce the overall cost of our transition to clean transportation. This provision should be strengthened, however, by requiring Level 2 charging capacity in all new parking stalls (for commercial and multi-family buildings), as Vancouver and other cities have done. This will help to "future-proof" new construction and accelerate our clean transportation future.

Mahalo for considering my testimony in support of Bill 25. This is a good step in the right direction.

Testimony

Attachment

Accept Terms and
Agreement 1

July 24, 2019

Dear ZPH Chair Menor and Committee Members,

I support Bill 25. For the reasons below, I ask you to change all the bill's language about Level 1 charging to be Level 2 charging. I understand that Level 2 is fast becoming the standard nationwide, because it is several times faster, making EVs far more convenient and practical for homeowners and renters in a wide variety of situations. Lack of access to ample charging infrastructure or "Range anxiety" (fear one's battery won't last to the next charging station) should not prevent people from EV adoption, is a certain eventuality in Hawaii.

Items 17, 28 and 31 in Bill 25--the solar water heating and EV-readiness parts--will do three important things:

1. Lower the cost of living for long-term Hawaii residents. Paying a permanent monthly bill for natural gas to heat water in sunny Hawaii is just silly. Solar water heating pays for itself in three or four years, and residents don't have a monthly gas bill. Ever. An electric water heater accounts for over 25% of the average electric bill. The sun is free.

Electric vehicles (EVs) will replace gas cars in the near future. Hawaii residents will need some way to charge at home. How will they afford to install the electrical equipment needed for that? Installing it is far less expensive during construction. Don't force new homeowners to spend thousands of dollars to retrofit their homes for the EV they will be driving within the next decade or two.

2. Help to fight our climate crisis. Those who want a choice of gas water heating should consider that the methane they would burn affects all of us. Their kokua is essential.

Hawaii needs to adopt EVs widely and quickly if we hope to meet our clean energy goals. The top two reasons people don't buy an EV right now are range anxiety, and too few charging stations in general [1]. Remove these barriers, and people will adopt. Cutting our greenhouse gas emissions depends on it.

3. Show some leadership! We're all very proud to be the first state to commit to 100% clean energy, but how will we get there? The Federal government is in love with coal. The Hawaii legislature did very close to nothing this year.

That leaves you. Are we all waiting for a giant hurricane to wipe out Waikiki? Are you waiting for Kam Highway to fall into the ocean completely? We know now that clean energy by 2045 is too little, too late, and it's past time to move the goal up. Way up.

You and state lawmakers are supposed to write laws to help protect us from sea level rise, catastrophic hurricanes, and rain bombs. This bill and stronger amendments deserve support from anyone who will be affected by the climate crisis or concerned about its impact on the economy.

Thank you for the opportunity to testify.
Rita Ryan

From: CLK Council Info
Sent: Wednesday, July 24, 2019 8:11 AM
Subject: Council/Public Hearing Speaker Registration/Testimony

Speaker Registration/Testimony

Name	Katherine Pomeroy
Phone	8084307188
Email	k2pome@gmail.com
Meeting Date	07-25-2019
Council/PH Committee	Council
Agenda Item	bill 25
Your position on the matter	Support
Representing	Self
Organization	
Do you wish to speak at the hearing?	No
	Aloha,
Written Testimony	Hawaii has the opportunity in being a leader for climate crisis policy development. Please take this opportunity to support Bill 25.
	Mahalo, Katherine Pomeroy
Testimony Attachment	
Accept Terms and Agreement	1

Speaker Registration/Testimony

Name Wilma Nakamura
 Phone 808-283-5505
 Email wwnakamura@gmail.com
 Meeting Date 07-25-2019
 Council/PH Committee Zoning
 Agenda Item Bill 25 (2019)
 Your position on the matter Support
 Representing Self
 Organization
 Do you wish to speak at the hearing? No

Written Testimony I leased a Nissan Leaf for 3 years. I speak from experience. Please change level 1 to level 2. I had a level 1 and then had to install a level 2 charger at my home. Level 1 should not even be considered. It is too slow. Electric cars are well made, quiet, no pollution, no smelly toxic fumes and the smart choice for the future. Stop denying we need to all drive electric cars in Hawaii. It's going to happen any way.

Testimony Attachment

Accept Terms and Agreement 1

Speaker Registration/Testimony

Name Nanea Lo
 Phone 18084543504
 Email naneaclo@gmail.com
 Meeting Date 07-24-2019
 Council/PH Committee Zoning
 Agenda Item Bill 25
 Your position on the matter Support
 Representing Self
 Organization
 Do you wish to speak at the hearing? Yes

Dear ZPH Chair Menor and Committee Members,

I support Bill 25. For the reasons below, I ask you to change all the bill's language about Level 1 charging to be Level 2 charging. I understand that Level 2 is fast becoming the standard nationwide, because it is several times faster, making EVs far more convenient and practical for homeowners and renters in a wide variety of situations. "Range anxiety" (fear one's battery won't last to the next charging station) should not prevent people from switching to an EV, which nearly everyone in Hawaii must eventually do.

Items 17, 28 and 31 in Bill 25--the solar water heating and EV-readiness parts--will do three important things:

Written Testimony

1. Lower the cost of living for long-term Hawaii residents. Paying a permanent monthly bill for natural gas to heat water in sunny Hawaii is just silly. Solar water heating pays for itself in three or four years, and residents don't have a monthly gas bill. Ever. An electric water heater accounts for over 25% of the average electric bill. The sun is free.
Electric vehicles (EVs) will replace gas cars in the near future. Hawaii residents will need some way to charge at home. How will they afford to install the electrical equipment needed for that? Installing it is far less expensive during construction. Don't force new homeowners to spend thousands of dollars to retrofit their homes for the EV they will be driving within the next decade or two.
2. Help to fight our climate crisis. Those who want a choice of gas water heating should consider that the methane they would burn affects all of us. Their kokua is not just appreciated, it's essential.
Hawaii needs to adopt EVs widely and quickly if we hope to meet our clean energy goals. The top two reasons people don't buy an EV right now are range anxiety, and too

few charging stations in general [1]. Remove these barriers, and people will adopt. Cutting our greenhouse gas emissions depends on it.

3. Show some leadership! We're all very proud to be the first state to commit to 100% clean energy, but how will we get there? The Federal government is in love with coal. The Hawaii legislature did very close to nothing this year. That leaves you. Are we all waiting for a giant hurricane to wipe out Waikiki? Are you waiting for Kam Highway to fall into the ocean completely? We know now that clean energy by 2045 is too little, too late, and it's past time to move the goal up. Way up. You, and state lawmakers, are supposed to write laws to help protect us from sea level rise, catastrophic hurricanes, and rain bombs. This bill, and stronger amendments, deserve support from anyone with the least concern about climate change, or about saving consumers money.

Here's your chance to set an example. Take it!

[1] <https://www.media.volvocars.com/us/en-us/media/pressreleases/248305/poll-finds-americans-feel-electric-vehicles-are-the-future-of-driving>
Thank you for the opportunity to testify.

me ke aloha 'āina,
Nanea Lo

Testimony
Attachment
Accept Terms and Agreement 1

From: CLK Council Info
Sent: Tuesday, July 23, 2019 9:28 AM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Alana Rask
Phone 8084290479
Email 8alana8@gmail.com
Meeting Date 07-25-2019
Council/PH Committee Zoning
Agenda Item Bill 25
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No

Support for Bill 25, "Relating to the Adoption of the State Energy Conservation Code"
July 25, 2019, 9:00 AM hearing

Aloha Chair Menor, Vice Chair Waters, and members of the Committee,

I am testifying in strong support of Bill 25, "Relating to the Adoption of the State Energy Conservation Code."

Written
Testimony

This is a critical clean energy and climate measure that would modernize the City & County of Honolulu's building energy code. This modernization updates Honolulu's existing building energy code—which is over thirteen years out of date—to increase occupant health and comfort while significantly reducing energy use for new homes and buildings. The proposed code revision reflects broad changes in technology, building materials, and best practices, while considering Honolulu's unique island and building environment.

In addition, this measure would ensure that new homes come equipped with either solar or high-efficiency water heaters, helping to close the loophole that has allowed thousands of gas water heaters to be installed in recent housing.

Finally, Bill 25 helps Honolulu make the transition to zero emission vehicles by requiring that a certain percentage of new parking stalls be "EV-ready" (with wiring and capacity for EV chargers to be installed in the future). This will help to make electric vehicles more accessible to residents and reduce the overall cost of our transition to clean transportation. This provision should be strengthened, however, by requiring Level 2 charging capacity in

all new parking stalls (for commercial and multi-family buildings), as Vancouver and other cities have done. This will help to “future-proof” new construction and accelerate our clean transportation future.

Mahalo for considering my testimony in support of Bill 25.

Alana Rask
Waikiki

Testimony
Attachment

Accept Terms and
Agreement 1

From: CLK Council Info
Sent: Tuesday, July 23, 2019 9:25 AM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Brian Heithaus
Phone 5034288116
Email bheithaus@gmail.com
Meeting Date 07-25-2019
Council/PH Committee Zoning
Agenda Item Bill 25
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No

TO: The Committee on Zoning, Planning and Housing
FROM: Brian Heithaus

In STRONG SUPPORT of BILL 25

Dear Zoning, Planning, and Housing Committee Chair Menor and Committee Members,

Written
Testimony

The people of Honolulu are looking to you for leadership in our fight against the Climate Crisis. In recent years, various climate-saving bills have been introduced at the state legislature. These bills included expanding the infrastructure required for wider adoption of electric vehicles (EVs), solar rooftop ready homes, as well as bills designed to close the solar water heater loophole. All failed despite having overwhelming support from the public.

Efforts to move to a clean energy economy and expand green infrastructure are crucial pieces in our struggle to make the State zero-emission as soon as possible, and meaningfully address the Climate Emergency we face. Bill 25 would help advance these zero emission efforts, making a small but very needed step in the right direction.

Bolder steps, such as requiring PV on all new buildings and more Level 2 EV charging readiness, should be our goal. Please amend the language to require, AC Level 2 charger readiness, as Level 1 is much slower (it can take more than 24 hours to fully charge a vehicle), and will deter people from buying EVs.

But this bill is an important first step. AC Level 1 or 2 charger readiness for 25% of new

parking stalls, and 90% renewable energy water heating on residential buildings, are minimal requirements that should be supported by anyone with the least concern about the climate crisis, or about saving consumers money.

Bottom-line, the legislature has failed all of us. They chose to ignore the dire warnings from climate scientists that we have less than a decade to make meaningful greenhouse gas reductions or face a collapse of our life-support system. We need leaders who have the courage to do something about the Climate Crisis. I hope you are those leaders.

Please actively support this bill and help us take a small step toward a livable future on our planet.

Mahalo for this opportunity to testify.
Brian Heithaus

Testimony

Attachment

Accept Terms and
Agreement 1

From: CLK Council Info
Sent: Tuesday, July 23, 2019 8:33 AM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Lory Ono
Phone 8082361628
Email kealelani@gmail.com
Meeting Date 07-25-2019
Council/PH Committee Zoning
Agenda Item Bill 25
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No

Honolulu City Council
Zoning, Planning and Housing Committee
Support for Bill 25, "Relating to the Adoption of the State Energy Conservation Code"
July 25, 2019, 9:00 AM hearing

Aloha Chair Menor, Vice Chair Waters, and members of the Committee,

I am testifying in strong support of Bill 25, "Relating to the Adoption of the State Energy Conservation Code."

Written
Testimony

This is a critical clean energy and climate measure that would modernize the City & County of Honolulu's building energy code. This modernization updates Honolulu's existing building energy code—which is over thirteen years out of date—to increase occupant health and comfort while significantly reducing energy use for new homes and buildings. The proposed code revision reflects broad changes in technology, building materials, and best practices, while considering Honolulu's unique island and building environment.

In addition, this measure would ensure that new homes come equipped with either solar or high-efficiency water heaters, helping to close the loophole that has allowed thousands of gas water heaters to be installed in recent housing.

Finally, Bill 25 helps Honolulu make the transition to zero emission vehicles by requiring that a certain percentage of new parking stalls be "EV-ready" (with wiring and capacity for EV chargers to be installed in the future). This will help to make electric vehicles more

accessible to residents and reduce the overall cost of our transition to clean transportation. This provision should be strengthened, however, by requiring Level 2 charging capacity in all new parking stalls (for commercial and multi-family buildings), as Vancouver and other cities have done. This will help to “future-proof” new construction and accelerate our clean transportation future.

I truly believe that we should do everything in our power to provide a clean, sustainable environment for our future ohana.

Mahalo for considering my testimony in support of Bill 25.

Lory Ono

Testimony
Attachment

Accept Terms and
Agreement 1

From: CLK Council Info
Sent: Tuesday, July 23, 2019 12:57 PM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Nancy Davlantes
Phone 8082473681
Email ndavlantes@aol.com
Meeting Date 07-25-2019
Council/PH Committee Zoning
Agenda Item Bill 25
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No

I am testifying in strong support of Bill 25, "Relating to the Adoption of the State Energy Conservation Code."

This is a critical clean energy and climate measure that would modernize the City & County of Honolulu's building energy code. This modernization updates Honolulu's existing building energy code—which is over thirteen years out of date—to increase occupant health and comfort while significantly reducing energy use for new homes and buildings. The proposed code revision reflects broad changes in technology, building materials, and best practices, while considering Honolulu's unique island and building environment.

Written Testimony In addition, this measure would ensure that new homes come equipped with either solar or high-efficiency water heaters, helping to close the loophole that has allowed thousands of gas water heaters to be installed in recent housing.

Finally, Bill 25 helps Honolulu make the transition to zero emission vehicles by requiring that a certain percentage of new parking stalls be "EV-ready" (with wiring and capacity for EV chargers to be installed in the future). This will help to make electric vehicles more accessible to residents and reduce the overall cost of our transition to clean transportation. This provision should be strengthened, however, by requiring Level 2 charging capacity in all new parking stalls (for commercial and multi-family buildings), as Vancouver and other cities have done. This will help to "future-proof" new construction and accelerate our clean transportation future.

Mahalo for considering my testimony in support of Bill 25.

Nancy Davlantes
Kaneohe

Testimony
Attachment

Accept Terms and
Agreement 1

Speaker Registration/Testimony

Name	Brian S Yee
Phone	8087219021
Email	808mauka2makai@gmail.com
Meeting Date	07-25-2019
Council/PH Committee	Zoning
Agenda Item	Bill 25
Your position on the matter	Oppose
Representing Organization	Self
Do you wish to speak at the hearing?	No
Written Testimony	I am opposed to Bill 25, which will impact the cost of housing by making it more expensive to install solar hot water systems and EV charging.
Testimony Attachment	
Accept Terms and Agreement	1

From: CLK Council Info
Sent: Monday, July 22, 2019 5:27 PM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name	Cedric K. silva
Phone	(808)352-8358
Email	Silvakcedric@gmail.com
Meeting Date	07-25-2019
Council/PH Committee	Zoning
Agenda Item	Bill 25
Your position on the matter	Oppose
Representing	Self
Organization	
Do you wish to speak at the hearing?	No
Written Testimony	
Testimony Attachment	
Accept Terms and Agreement	1

From: CLK Council Info
Sent: Monday, July 22, 2019 5:30 PM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Joshua K. Silva
Phone (808)352-8586
Email Silvakjoshua@gmail.com
Meeting Date 07-25-2019
Council/PH Committee Zoning
Agenda Item Bill 25
Your position on the matter Oppose
Representing Self
Organization
Do you wish to speak at the hearing? No
Written Testimony
Testimony Attachment
Accept Terms and Agreement 1

From: CLK Council Info
Sent: Monday, July 22, 2019 5:45 PM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Junefer D. Silva
Phone (808)3580855
Email Silvar021@hawaii.rr.com
Meeting Date 07-25-2019
Council/PH Committee Zoning
Agenda Item Bill 25
Your position on the matter Oppose
Representing Self
Organization
Do you wish to speak at the hearing? No
Written Testimony
Testimony Attachment
Accept Terms and Agreement 1

From: CLK Council Info
Sent: Monday, July 22, 2019 5:47 PM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name	Frances D. Silva
Phone	(808)225-5499
Email	Silvaf33@hawaii.rr.com
Meeting Date	07-25-2019
Council/PH Committee	Zoning
Agenda Item	Bill 25
Your position on the matter	Oppose
Representing	Self
Organization	
Do you wish to speak at the hearing?	No
Written Testimony	
Testimony Attachment	
Accept Terms and Agreement	1

From: CLK Council Info
Sent: Monday, July 22, 2019 5:25 PM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name	Richard J Silva
Phone	8083528358
Email	Silvar021@gmail.com
Meeting Date	07-25-2019
Council/PH Committee	Zoning
Agenda Item	Bill 26
Your position on the matter	Oppose
Representing	Self
Organization	
Do you wish to speak at the hearing?	No
Written Testimony	
Testimony Attachment	
Accept Terms and Agreement	1

From: CLK Council Info
Sent: Monday, July 22, 2019 4:34 PM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Christopher Hall
Phone 8083887847
Email CHRISTOPHERKIMHALL@YAHOO.COM
Meeting Date 07-25-2019
Council/PH Committee Zoning
Agenda Item Bill 25
Your position on the matter Oppose
Representing Self
Organization
Do you wish to speak at the hearing? No
Written Testimony
Testimony Attachment
Accept Terms and Agreement 1

From: CLK Council Info
Sent: Tuesday, July 23, 2019 8:02 AM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name S. Hookano
Phone (808) 597-8388
Email shookano@kuiwalu.com
Meeting Date 07-25-2019
Council/PH Committee Zoning
Agenda Item ITEM 7. BILL 25 (2019) – RELATING TO THE ADOPTION OF THE STATE ENERGY CONSERVATION CODE.
Your position on the matter Oppose
Representing Self
Organization
Do you wish to speak at the hearing? No
Written Testimony Enough already! We are being overrun by rules and regulations that are short sighted, telling us what we can and cannot do, and it always boils down to more fines and taxes to build the City's coffers. This is only adding to and not a solution to the homeless situation.
Testimony Attachment
Accept Terms and Agreement 1

Speaker Registration/Testimony

Name Loren Pabila
 Phone 8089389907
 Email kuahiwe@hotmail.com
 Meeting Date 07-25-2019
 Council/PH
 Committee Zoning
 Agenda Item Bill 25
 Your position
 on the matter Oppose
 Representing Self
 Organization
 Do you wish to
 speak at the
 hearing? No

Written
 Testimony

Submitted respectfully, our local government needs to stop deciding for its constituents what they can or cannot have access to, especially in terms of what they want in their own homes. Hawaii is already severely regulated (ask anyone trying to do business or buy a home). The benefits of having an option of gas include additional peace of mind during a natural disaster (hot water to cook, bathe, etc.), a cheaper alternative to electricity, and reliability. Curtailing the choice of the population just adds to the long laundry list of what WE cannot do or decide for ourselves.

Testimony
 Attachment

Accept Terms
 and Agreement 1

Speaker Registration/Testimony

Name	Keith Yamamoto
Phone	8085314633
Email	kkyamamo@gmail.com
Meeting Date	07-25-2019
Council/PH Committee	Zoning
Agenda Item	Bill 25
Your position on the matter	Oppose
Representing	Self
Organization	
Do you wish to speak at the hearing?	No
Written Testimony	
Testimony Attachment	
Accept Terms and Agreement	1

From: CLK Council Info
Sent: Tuesday, July 23, 2019 11:54 AM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name	Jenny
Phone	8082847607
Email	jtanaka@hawaiiigas.com
Meeting Date	07-25-2019
Council/PH Committee	Zoning
Agenda Item	Bill 25
Your position on the matter	Oppose
Representing	Self
Organization	
Do you wish to speak at the hearing?	No
Written Testimony	I am in opposition of Bill 25, specifically to the proposed change for residential water heaters.
Testimony Attachment	
Accept Terms and Agreement	1

From: CLK Council Info
Sent: Tuesday, July 23, 2019 10:52 AM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Jennifer
Phone 8083065449
Email msjenjen808@gmail.com
Meeting Date 07-25-2019
Council/PH Committee Zoning
Agenda Item Bill 25
Your position on the matter Oppose
Representing Self
Organization
Do you wish to speak at the hearing? No

Written Testimony

We as homeowners of a new home or existing home should have the option of what type of energy we'd like to install; whether it be electric or tankless gas water heater. It is our home and we should have an option. Although the bill reads we are able to choose gas as our form of energy source the bill states the gas to power it needs to be made of 90 percent renewable energy. I know gas companies are trying to become renewable and are still working towards that. To take away the option completely is not giving them the opportunity to become renewable. It is simply taking that choose away from us now. Gas is clean and efficient. Allow the gas companies out there to continue with their plans to become renewable but it the meantime don't take that options away from us. And for these reasons I oppose Bill 25.

Testimony Attachment

Accept Terms and Agreement 1

From: CLK Council Info
Sent: Tuesday, July 23, 2019 3:12 PM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Laurie Chun
Phone 8082280977
Email alchunhi@gmail.com
Meeting Date 07-25-2019
Council/PH Committee Zoning
Agenda Item Bill 25
Your position on the matter Oppose
Representing Self
Organization
Do you wish to speak at the hearing? No

Written Testimony
I oppose bill 25 since it eliminates freedom to choose. People should have the option to have propane instant water heaters which are a more affordable option as compared with costly PV systems which may or may not be 'approved' by HECO. Not everyone can afford or qualify to purchase PV systems. Please don't forget the hardworking average local people. Please don't make it harder for us by taking away more affordable energy options. During electrical outages, for public health & safety people can still have access to propane heated hot water. We live in such an isolated state, in the middle of the Pacific Ocean. I believe we need to diversify our energy sources in cases of emergencies. Energy diversity will ease, and spread out the burden of emergency recovery efforts. People should have the right to choose and have options. Give people energy choices and energy options.

Testimony Attachment
Accept Terms and Agreement 1

From: CLK Council Info
Sent: Tuesday, July 23, 2019 3:54 PM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Coreen Lee
Phone 8082254612
Email kapilipono808@yahoo.com
Meeting Date 07-25-2019
Council/PH Committee Zoning
Agenda Item Bill 25
Your position on the matter Oppose
Representing Self
Organization
Do you wish to speak at the hearing? No

Aloha -

After understanding the research, it is clear that Honolulu needs to ensure there continues to be energy options for residents. This is a matter of ongoing affordability, consistent reliability and ensuring there is resiliency during storms/natural disasters.

Written
Testimony

There is evidence from lessons learned from Puerto Rico, Hawaii MUST ensure a diverse range of energy choices, so that if there is a natural disaster, we have options during recovery that are NOT reliant on one source. Eliminating gas is simply irresponsible and reckless, given our landscape and increased likelihood of hurricane/natural disasters.

Respectfully,
Dr. Lee

Testimony
Attachment

Accept Terms
and Agreement

1

Speaker Registration/Testimony

Name	Jeffrey Won
Phone	8087545110
Email	jeff.won5110@gmail.com
Meeting Date	07-25-2019
Council/PH Committee	Zoning
Agenda Item	Bill 25
Your position on the matter	Oppose
Representing	Self
Organization	
Do you wish to speak at the hearing?	No
Written Testimony	
Testimony Attachment	
Accept Terms and Agreement	1

Speaker Registration/Testimony

Name Genine N Nishihara
 Phone 8085945587
 Email gnishihara@hawaiiigas.com
 Meeting Date 07-25-2019
 Council/PH
 Committee Zoning
 Agenda Item Bill 25
 Your position on
 the matter Oppose
 Representing Self
 Organization
 Do you wish to
 speak at the
 hearing? No

Written
 Testimony

So what's going to happen when the power goes out due to a hurricane, etc. The whole island will suffer if we don't have propane or gas. We need alternatives especially when living on an island. In the mainland, they can haul things from state to state. We do not have that luxury when living on an island in the middle of the ocean.

Testimony
 Attachment

Accept Terms
 and Agreement 1

Speaker Registration/Testimony

Name Steve Granato
 Phone 8083687602
 Email granato808@hotmail.com
 Meeting Date 07-25-2019
 Council/PH Committee Zoning
 Agenda Item Bill 25, act 25
 Your position on the matter Comment
 Representing Self
 Organization

Do you wish to speak at the hearing? No

Bill 25, "Relating to the Adoption of the State Energy Conservation Code."

I am FOR More EV charging on Oahu.

Written Testimony Specifically, "Type 2" charging.

Type 1 chargers are so slow, it's a waste of \$\$\$ to install. Not even worth using if you have electric car.

Thank you!

Testimony Attachment

Accept Terms and Agreement 1

From: CLK Council Info
Sent: Tuesday, July 23, 2019 5:47 PM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name	MICHAEL MOORE
Phone	808-728-1505
Email	mmsurfsoccer@yahoo.com
Meeting Date	07-25-2019
Council/PH Committee	Zoning
Agenda Item	Honolulu's building energy code
Your position on the matter	Comment
Representing Organization	Self
Do you wish to speak at the hearing?	No
Written Testimony	As an electric vehicle owner for 4 1/2 years I support Bill 25 requiring EV charging infrastructure. Please note that requiring level 1 charging is, in my opinion, a mistake. Level 2 charging is needed. Level 1 charging is so slow that it is impractical to use. Please listen to other EV owners and ask the EV dealers for the best charging solution.
Testimony Attachment	
Accept Terms and Agreement	1



COMMITTEE ON ZONING, PLANNING AND HOUSING

City and County of Honolulu

July 25, 2019, 9:00 A.M.

(Testimony is 10 pages long)

TESTIMONY IN SUPPORT OF BILL 25 (2019), WITH SUGGESTED AMENDMENTS

Relating to the adoption of the State Energy Conservation Code

Chair Menor, Vice Chair Waters, and Members of the Committee on Zoning, Planning and Housing:

Blue Planet Foundation strongly supports Bill 25 (2019), a measure to modernize the City & County of Honolulu's (Honolulu's) building energy code. The proposed bill adopts a revised version of the Hawai'i Energy Code for Honolulu. These revisions would update Honolulu's existing building energy code—which is over thirteen years out of date—to increase occupant health and comfort while reducing energy use. The proposed code revision reflects broad changes in technology, building materials, and best practices, while considering Honolulu's unique island and building environment. ***We respectfully offer two proposed amendments on page 8 of our testimony to better “future-proof” new buildings to handle the rapid increase in zero emission vehicles.***

Blue Planet Foundation is a Hawai'i-based nonprofit organization. We work to clear the path for local, clean, renewable power. Through our advocacy for clean energy adoption, we seek to make our communities stronger, our energy more secure, our environment healthier, and our economy more robust. We appreciate Honolulu's growing leadership on clean energy issues.

As detailed below, the building energy code update proposed in Bill 25 is:

- enormously cost-effective for residents and business owners on O'ahu;
- consistent with the state's very strong policy directives in favor of energy conservation; and
- flexible to make compliance easier for builders.

The Code Updates Support the State's Energy Mandates in a Cost-Effective Manner

Energy efficiency is the most cost-effective energy resource available in the state, costing a fraction of fossil fuel-powered electricity.¹ The anticipated energy savings arising from the 2015

¹ Energy savings delivered by the state's Hawai'i Energy program in 2016 cost 2.06 cents per kWh. See *Hawaii*

IECC (International Energy Conservation Code) were tabulated in a May 2016 Report prepared for the Department of Business, Economic Development & Tourism (“DBEDT”).² When translated into dollars, the billions in savings plainly illustrate the enormous benefit of the proposed amendments.

Statewide Savings	2016	2026	2030	2036
MWh	12,962	1,083,590	1,991,059	4,702,738
\$	\$4,000,000	\$337,000,000	\$619,000,000	\$1,463,000,000

(Note: energy cost savings calculated here utilize the average retail cost of electricity over the past five years;³ this provides a conservative estimate of cost savings, because it does not factor a potential rise in energy prices.)

Extrapolating the savings for O’ahu based on the percentage of energy used on the island versus statewide energy use, **the estimated 20-year savings for O’ahu is over \$971 million under the proposed building energy code revisions (approximately \$318 million in residential energy savings and \$653 million in commercial energy savings).**

The substantial savings resulting from reduced energy use dwarf the associated costs. In its February 2016 report, the Pacific Northwest National Laboratory stated: “The 2015 IECC provides cost-effective savings for residential buildings in Hawai’i. Moving to the 2015 IECC from the 2006 IECC base code is cost-effective for residential buildings in all climate zones in Hawai’i.”⁴ Moreover, we understand that this cost-effectiveness may be *even higher* for many residential buildings in Hawai’i, where immediate cost savings can be obtained via lower construction costs *and* lower energy costs by utilizing the particularly important portions of the code applicable to the tropical zone. In such instances, the “payback” period would be immediate.

Energy Conservation is a Bedrock Policy of the State

The energy landscape has shifted dramatically in the last decade. In 2015, Hawai’i adopted the nation’s first 100% renewable energy mandate. Meanwhile, as Hawai’i and other places around the globe have made smarter energy a priority, technologies for energy efficiency and other demand-side management strategies have progressed rapidly alongside.

Energy 2014 Annual Report, available at https://hawaiienergy.com/images/resources/ProgramYear2016_AnnualReport.pdf. Even with today’s relatively low oil prices, electricity from oil-fired power plants costs around seven times more. See *DBEDT Monthly Energy Trends*, available at <http://dbedt.hawaii.gov/economic/energy-trends-2/>.

² See The Cadmus Group, Inc., *Energy Savings Forecast for the 2015 Int’l Energy Cons. Code with Haw. Amendments* (prep’d for DBEDT, May 2016), available at <https://energy.hawaii.gov/wp-content/uploads/2016/07/Energy-Savings-Forecast.pdf>.

³ See DBEDT Monthly Energy Trends.

⁴ Pac. Northwest Nat’l Lab., *Cost-Effectiveness Analysis of the Residential Provisions of the 2015 IECC for Hawaii* (prep’d for the U.S. Dept. of Energy by, Feb. 2016), available at https://www.energycodes.gov/sites/default/files/documents/HawaiiResidentialCostEffectiveness_2015.pdf

These policy and technical advancements have left a gap between the existing code (based on the IECC of 2006) and today's energy realities. The proposed 2015 update in Bill 25 will take important steps to narrow the gap.

In a state with no indigenous fossil fuels, it makes sense that energy conservation is a core principle. Indeed, the importance of energy stewardship and efficiency is directly embedded within Hawai'i's constitution:

For the benefit of present and future generations, the State and its political subdivisions shall conserve and protect Hawaii's natural beauty and all natural resources, **including . . . energy sources, and shall promote the development and utilization of these resources in a manner consistent with their conservation** and in furtherance of the self-sufficiency of the State.⁵

Similarly, state lawmakers have stated that planning for the state's infrastructure shall be directed toward the achievement of objectives that include: "Sequester more atmospheric carbon and greenhouse gases than emitted within the State as quickly as practicable, but no later than 2045";⁶ and "Increased energy security and self-sufficiency through the reduction and ultimate elimination of Hawai'i's dependence on imported fuels for electrical generation and ground transportation."⁷

To achieve these objectives, it is the official policy of the state to promote energy conservation through measures such as: "**Adoption of energy-efficient practices and technologies**" and "**Increasing energy efficiency and decreasing energy use in public infrastructure.**"⁸

These constitutional and legislative policy directives in favor of energy conservation strongly support Bill 25 to modernize the Honolulu building energy code.

The Code Updates Provide Compliance Flexibility to Builders

Many of the building energy code amendments in the proposed energy code update address Hawai'i's tropical environment. Further, they provide flexibility and options to builders to comply with the code, reducing construction costs and making compliance easier. Specifically:

- Walls of residential and commercial buildings are exempt from expensive exterior insulation requirements when they are shaded or have light-colored exterior coatings.

⁵ Haw. Const. art. XI, § 1 (emphasis added).

⁶ Hawai'i Revised Statutes (HRS) § 225P-3(a).

⁷ HRS § 226-18(a).

⁸ HRS § 226-18(c)(4) (emphasis added).

- Mass walls six inches and thicker in commercial buildings will not be required to have insulation. The national code requires R-5.7 continuous insulation, which would add substantially to the cost of construction.
- Lighting systems in commercial buildings may be designed to 70% of 2015 IECC lighting power density in lieu of installing complex daylighting and dimming systems which add to design, material and labor costs. The 70% option reaps greater energy savings than would the two control systems.
- Roof replacements in commercial buildings may be done with solar reflectance, attic ventilation or radiant barriers, substantially reducing construction costs compared to national code requirements.
- Homes will not be required to insulate floors to R-13, substantially reducing construction costs.
- Re-roofed homes will be allowed to comply with the options of ENERGY STAR roof coverings, radiant barriers, or attic ventilation in lieu of more expensive insulation requirements.
- The Tropical Code option section is designed for homes with no air conditioning or minimal air conditioning. The design eliminates the requirement for tight home construction and minimizes wall and roof insulation requirements. The point system rewards design promoting cross ventilation and large overhangs over walls and windows and other passive design features, lowering construction costs. An optimized Tropical Code home, compared to an air-conditioned home, reduces energy by as much as 48%.

The Code Makes Sensible Additions to Honolulu's Building Energy Code

In addition to the myriad energy saving additions incorporated in the updated IECC 2015 building energy code (as proposed for Honolulu), Blue Planet Foundation appreciates the inclusion of the following energy upgrades in this proposed ordinance:

- Sub-metering is required in commercial tenant spaces, providing more visibility into energy use for tenants and enabling them to take better control of their energy finances.
- Lanai doors in hotel and similar buildings shall include a switch that turns off the air conditioning if the door is not closed. This reduces energy costs and prevents warm moist air from coming into contact with cold surfaces, potentially causing condensation, mold, and health issues.

Bill 25 Wisely Provides High-Efficiency and Renewable Water Heater Options

Solar water heating is recognized as an incredibly efficient—and cost-saving—strategy for most homes. Since 2010, the state has required solar water heating in almost all new homes. But this law has a variance process for rare exceptions where solar just doesn't work. Unfortunately, this variance has been abused by developers, despite the legislature's clear intent that variances "will be rarely, if ever, exercised or granted." Consequently, nearly half of new homes proposed or being built today on O'ahu include fossil-fuel gas water heaters. Thousands of homes on the hot Ewa Plain of O'ahu are slated to be built with gas water heaters, locking future homeowners into higher energy costs over years of home ownership. Instead of being part of our clean energy future, these homes will contribute to climate change for decades into the future.

Bill 25 corrects the solar water loophole, ensuring that new homes built today come equipped with water heaters powered by the sun (or another renewable source), or—if a renewable source isn't cost effective—a water heater that works as a heat pump, a "smart" grid-interactive water heater, or a water heater that uses at least 90% renewable gas. Again, if a solar- or renewable-powered water heater does not make sense economically—based upon a lifecycle cost-benefit analysis that incorporates the average residential utility bill and the cost of the new solar water heater system with a lifecycle that does not exceed fifteen years—then one of the following technologies advancing clean energy may be used instead:

Heat pump water heater. A heat pump uses electricity to move heat from one place to another (like a refrigerator operating in reverse) rather than generating its own heat like a traditional electric water heater. This makes heat pumps two to three times more efficient, according to the Department of Energy (DOE). Heat pumps can also work to help cool homes. According to the DOE, a heat pump water heater can save an O'ahu household of four people nearly \$1,000 per year on their electric bill.

Grid-interactive water heater (GIWH). A GIWH is a smart water heater that uses intelligent controls that are capable of interacting with and participating in utility load control or demand response programs. This allows the water heater to be an asset on the utility grid by smoothing out electricity usage and increasing the use of variable renewable energy. A local company, Shifted Energy, has already deployed hundreds of GIWH systems across O'ahu.

Renewable gas water heater. A renewable gas water heater would heat water using no less than 90% renewable gas fuel. This could be natural gas or methane produced from renewable sources (such as biomass or methane from wastewater treatment plants or landfills), or hydrogen gas developed from renewable sources.

This addition to the proposed building energy code update provides flexibility to developers while ensuring that future homes will be built with high-efficiency or renewable water heaters.

Bill 25 Helps to Make Electric Vehicles More Accessible to Residents

Blue Planet Foundation strongly supports the inclusion of a limited “EV-ready” requirement for new commercial and multi-family residential construction in Bill 25. This is an important first step to lowering the overall cost of our transition to electrified transportation and make electric vehicles more accessible to O’ahu residents. *We do, however, encourage the Council to strengthen this provision in Bill 25 (please see our proposed amendment at the end of this testimony).*

Electric vehicles (EV) are the fastest growing segment of new cars in Hawai‘i. Over the past year (May 2018 – May 2019), EV registrations on O’ahu increased by over 30%, while registrations of gasoline-powered vehicles grew only 0.1 percent.⁹ We expect over 10,000 EVs registered statewide by the end of this year—a number that is expected to grow exponentially as new EV models with longer ranges and lower prices hit the market.

Electric vehicles will play an integral role in Hawai‘i’s clean energy future. While EVs that use the existing electricity grid to charge still use mostly fossil fuel, they use that fuel more effectively than burning fuel directly in a typical gasoline engine. This is why EVs are much less expensive to “fuel” per mile than their gasoline counterparts. Further, by using stored electrical energy, EVs can take advantage of intermittent solar, wind, and other clean energy resources. Most vehicles sit idle over 22 hours of the day, so they can become *de facto* energy storage devices if their batteries are plugged into the grid when they are not in use. With smart grid infrastructure in place, EVs become an essential component to electricity load and clean energy resource balancing—in addition to providing clean mobility solutions for Hawai‘i residents.

Still, over 600,000 gasoline-powered vehicles are on O’ahu’s roads—and from them comes nearly five million metric tons of climate-changing carbon pollution. What’s worse, while O’ahu has made decent progress in reducing its carbon emissions from the electricity sector, emissions from ground transportation have been increasing in recent years.

The International Energy Agency has found that “the availability of chargers emerged as one of the key factors for contributing to the market penetration of EVs.”¹⁰ Unlike gasoline car owners, charging behavior for EV owners indicates that more than 80% of EV drivers charge their cars at home or at work.¹¹ In addition, a large share of the Honolulu’s population lives in high density, multi-family residential buildings. The vast majority of parking facilities currently lack EV chargers.

By ensuring that we are “future-proofing” new construction projects, this measure is an important step toward increasing electric vehicle charging options for those who don’t have access to charging at home or at work.

⁹ DBEDT Monthly Energy Trends, June 2019 (<http://dbedt.hawaii.gov/economic/energy-trends-2/>).

¹⁰ *Global EV Outlook 2017*, <https://www.iea.org/publications/freepublications/publication/GlobalEVOutlook2017.pdf>.

¹¹ *Id.*

Honolulu can expect more residents to choose EVs over gasoline vehicles as prices decrease. Battery costs have fallen precipitously over the past several years so that in many cases, the total cost of ownership for EVs is lower than for gasoline vehicles. Experts expect battery prices to continue to fall and as automakers increase the number of models and volume of EVs in the next few years, the upfront cost of EVs is expected to reach upfront cost parity with gasoline vehicles by 2024.¹²

In part due to falling costs and increasing consumer demand, and in part due to government policies supporting EVs, nearly all of the world's leading automakers have announced aggressive strategies and investments in EVs during the past two years.

The most challenging aspect of EV charger installation is the common lack of electrical capacity and distributed subpanels to support broad deployment of charging infrastructure. **By choosing not to install the wiring and conduit upfront in new construction, developers are forcing tenants to pay for expensive retrofit costs to upgrade power capacity and wiring to their parking stalls.**

Studies have shown that **installing EV infrastructure at the time of construction can be 91% less expensive than post-construction retrofits**, and per stall installation costs can be reduced through economies of scale.¹³ Vancouver, BC, found that the average cost of adding charging infrastructure during construction was about \$300 (CAD) per stall compared to an estimated \$3,300 for a later retrofit.

While this bill would not require the installation of the actual EV charging infrastructure, it would require that the power capacity and conduit be set up during construction, which would dramatically reduce retrofit costs at the time of charger installation, creating cost savings downstream for residents and tenants.

Cities around North America are adopting EV-ready requirements for commercial and residential new construction. Seattle, San Jose, Atlanta, San Francisco, and Oakland have adopted requirements for a certain percentage of stalls to be ready for Level 2 charging. Vancouver, British Columbia, now requires that 100% of new parking stalls be built ready for EV chargers. Honolulu—with the second highest adoption of EVs per capita nationwide—should implement a similar policy.

Electric vehicles are better for the environment and the economy and can help O'ahu reach its renewable energy and transportation goals. The time has come when Honolulu residents want to purchase electric vehicles but need convenient and affordable charging options. An EV-ready requirement will ensure that the EV charging infrastructure network necessary to support the

¹² See Bloomberg New Energy Finance, <https://bnef.turli.co/story/evo2018>.

¹³ See <http://evchargingpros.com/wp-content/uploads/2017/04/City-of-SF-PEV-Infrastructure-Cost-Effectiveness-Report-2016.pdf>.

influx of electric vehicles can be installed more efficiently and cost-effectively in new construction projects. It will provide new EV owners—particularly those that will live in new multi-family residential buildings—with the confidence that they will be able to access charging at home, at the workplace, and in public spaces.

SUGGESTED AMENDMENTS

Blue Planet Foundation respectfully requests that Councilmembers consider two amendments to strengthen Bill 25 to better “future-proof” new multi-family homes and buildings to handle the rapid increase in zero emission vehicles:

1. First, we ask that the provision in Bill 25 for EV-ready infrastructure be amended to **require Level 2 EV-ready infrastructure** instead of Level 1 for multi-family residential construction with over eight parking stalls; and
2. Second, we suggest that the requirement for Level 2 EV-ready parking stalls to applied to **all new parking stalls** in multi-family and commercial buildings.

The current draft of Bill 25 requires that residential multi-family dwellings (with more than eight parking stalls) include at least 25% EV-ready stalls—but only equipped to handle Level 1 (or slow) charging infrastructure. This is woefully inadequate for meaningful vehicle charging and significantly reduces the opportunity to use vehicle charging for utility demand response or load control programs. Further, the current provision in Bill 25 is a departure from the EV-ready requirements that are increasingly being adopted around the country, which are standardized around Level 2 charging.

Level 1 charging, or “trickle charging,” means charging an EV using a standard 120-volt outlet. The rate of charge associated with this is roughly four miles of driving range per hour of charging. Below is a list of the most commonly purchased EVs and the associated charging time for a full charge from a Level 1 charger:

- Nissan Leaf – 1.7 to 2.6 days
- Chevy Bolt – 2.5 days
- Tesla Model 3 – 2.5 to 3.1 days

These charging times are impractical for most drivers and would likely lead to unnecessary cost for residents to later upgrade the electrical equipment to handle faster charging. To the degree the intent of the proposed EV-ready amendment is to ensure that buildings are constructed in a manner that can effectively support the decision of Honolulu residents to purchase an EV, this particular provision needs to be changed to require Level 2 charging.

Blue Planet Foundation also supports expanding this EV-ready requirement from 25% of new stalls to 100% of new parking stalls. With the rapid rate of change in the adoption of EVs, we expect that most new cars sold in Hawaii will be electric or hybrid within a decade. Yet Bill 25 as currently drafted only envisions 25% of new stalls needing future chargers. It is also unclear how these stalls will be allocated to future homeowners, tenants, or renters—will those who

would like to install an EV charger be able to access the one-in-four stalls that are EV-ready? This measure should reflect and anticipate the future where nearly all vehicles are zero emissions. This is particularly important given the slow pace of updating Honolulu's building energy code. Failure to do so will lead to unnecessary expense in retrofitting relatively recent buildings with what will soon be commonplace amenities.

This is also an issue of equity. It's likely that the initial group of individuals purchasing EVs will be more affluent than later adopters—this holds true for many innovations, as they are initially more expensive. They will be positioned to take advantage of the 25% of stalls that are EV-ready. But what about later adopters who are less affluent? this policy may have the effect of burdening these later EV adopters with the high costs of retrofitting to install EV infrastructure in already completed buildings. Simply requiring that all stalls are EV-ready avoids this potential inequity.

Requiring that all new parking stalls be EV-ready is not without precedent. Again, the city of Vancouver, BC, passed a law updating their four-year-old EV-ready requirement from 20% of new residential stalls to 100% of new stalls.¹⁴ The law took effect January 1 of this year. Since 2014, existing requirements have resulted in 20,000 electric vehicle-ready stalls in buildings.¹⁵ Other cities are considering similar 100% EV-ready policies.

To accomplish this, Blue Planet Foundation requests that the proposed language in Bill 25 relating to Subsection C406.8 should be modified as follows (underlined indicates additions, ~~strikethrough~~ indicates deletions):

C406.8 Electric vehicle infrastructure. All parking stalls in n~~buildings that have eight or more parking stalls, and new commercial buildings that have twelve or more parking stalls,~~ New residential multi-unit shall be electric vehicle charger ready ~~for at least 25 percent of the parking stalls.~~ As used in this section, "electric vehicle charger ready" means that sufficient wire, conduit, electrical panel service capacity, overcurrent protection devices and suitable termination points are provided to connect to a charging station capable of providing simultaneously an AC Level 4 2 ~~charge per required parking stall for residential and multi-unit buildings.~~ charge per required parking stall ~~For commercial buildings, at least 25 percent of the parking stalls are required to be AC Level 2 charger ready.~~ Charge method electrical ratings are provided below:

CHARGE METHODS ELECTRICAL RATING

Charge Method	Normal Supply Voltage (Volts)	Maximum Current (Amps – Continuous)	Supply Power
AC Level 1	<u>120V AC, 1-Phase</u>	12A 16A	120VAC/20A (12-16A continuous)

¹⁴ See <https://vancouver.ca/streets-transportation/electric-vehicles.aspx>

¹⁵ See <https://www.vancourier.com/news/city-council-boosts-electric-vehicle-infrastructure-1.23202750>

	120V AC, 1-Phase		
AC Level 2	208 to 240V AC, 1-Phase	≤ 80A	208/240VAC/20-100A (16-80A continuous)

Blue Planet Foundation is open to working with the Council on identifying ways to make this EV-ready policy more acceptable to all stakeholders. Potential approaches to decreasing the potential burden of this proposed EV-ready policy (as amended) include:

1. **Phase-in period.** Increase the required percentage of stalls in phases (i.e. 25% of new stalls starting January 1, 2020; 50% starting January 1, 2021; 75% starting January 1, 2022; 100% starting January 1, 2023).
2. **Limit requirement.** For multi-family buildings, visitor parking could be excluded (Vancouver does not require visitor parking to be EV-ready).
3. **Allow the use of EV Energy Management Systems (EV EMS).** Providing the capability for every parking stall to charge an EV at Level 2 may lead to unnecessary expense in developing the building's electrical capacity (transformer, circuit capacity, etc.). In reality, all cars charging at once is an unlikely scenario, but engineers would need to design for that extreme possibility. In order to minimize the impact on builders and the utility grid, Vancouver's requirements allow the use of an EV EMS. Because most personal vehicles are parked for 8 to 10 hours per day at home, an EV EMS allows multiple vehicles to share a circuit. This significantly reduces construction costs and utility costs. In Vancouver's law, an EV EMS must ensure that every EV charging outlet receive at least 12kWh over an 8-hour period. This means that, even if a vehicle is plugged into every single outlet at once, all EVs will receive enough energy for the next day (about 50 miles with today's EV technology, or about twice the average daily distance driven on O'ahu).

Blue Planet Foundation would be happy to provide draft language to the Committee accomplish this and ensure that we have a smart EV-ready policy for new construction on O'ahu that maximizes the benefits of clean transportation and smart buildings for all.

Conclusion

The proposed Honolulu building energy code amendments in Bill 25 are sensible, cost-effective, and flexible. They are a meaningful response to our climate crisis and the need to decrease the cost of living for O'ahu residents. Blue Planet Foundation strongly supports Bill 25's adoption with our proposed amendment to increase the EV-ready provision to handle Level 2 charging in all new parking stalls. We are happy to answer any questions about this proposed bill or our testimony. Mahalo for this opportunity to provide testimony.



July 22, 2019

Bill 25: Energy Code Update

Re: Hawaii Bill 25: Introduction of EV Readiness

Dear The Honorable Ron Menor, Chair and Members,

Forth is pleased to offer this letter of support to help Hawai'i's journey towards 100% clean energy through the Bill 25 Energy Code Update.

Forth is a nonprofit partner to the City of Honolulu for the Bloomberg American Cities Climate Challenge with a mission to promote, support, the advancement of electric mobility. Forth encourages support for the addition of Electric Vehicle Readiness to the Bill 25 Energy Code Update. EV readiness for retrofits can cost 4 to 8 times more than ensuring EV readiness during new build construction. This update to the code directly supports the Administration's commitment to transform all ground transportation to renewable fuels by 2035.

Our experience has found that addressing and planning for electric transportation early can lead to an acceleration in the implementation of electric vehicle charging infrastructure and electric vehicle ownership and use. Costs for such efforts, according to our partners in the building and trade sectors, can be de minimis and should not distract from the overall benefits from such action. Best practices such as these are being implemented around the country and stand out as one of the easiest ways to support a long-term transition to electric transportation.

If you have any questions, about this engagement or Forth's role please don't hesitate to reach out.

Best,

A handwritten signature in blue ink that reads "Zach Henkin". The signature is written in a cursive, flowing style.

Zach Henkin

Deputy Director, Forth

503.803.3036



SHIFTED ENERGY.

2800 Woodlawn Drive, #101, Honolulu, HI 96822
Telephone: +1.808.664.0053 | Email: info@ShiftedEnergy.com

Zoning, Planning and Housing committee
COMMITTEE MEETING ROOM THURSDAY, JULY 25, 2019 9:00 A.M.

July 25, 2019

Shifted Energy Supports Bill 25 Relating to the adoption of the State Energy Conservation Code

Aloha Chair Menor and members of the Zoning, Planning and Housing committee:

Thank you for the opportunity to submit testimony in **strong support** of Bill 25. The inclusion of grid-interactive water heater requirements within the Solar Water Heating mandate, in alignment with the International Energy Conservation Code, provides an important tool to enable Hawai'i to meet its renewable energy goals while ensuring that all ratepayers benefit from the realization of those goals.

Shifted Energy was founded in Hawai'i in 2014 from the energy efficiency and energy justice activities of non-profit Kanu Hawai'i. During our community engagement and outreach activities, we identified two key lessons that are relevant to the Council's current deliberations:

- 1) Low and moderate income families, multi-family dwelling residents, and renters are often not able to take advantage of emerging technologies, such as rooftop solar and home battery systems, that would reduce their electric bills and allow them to support renewable energy deployment; and
- 2) Electric water heating is the predominant form of water heating and makes up a disproportionately large percentage of many Hawai'i residents' electric bills.

Shifted Energy was incubated out of Kanu Hawaii with the goals of engaging hard-to-reach communities in the renewable energy transformation through utilization of their electric water heaters. We currently employ 6 people on Oahu, have just hired a new engineering graduate who we connected with through HTDC, and look forward to continue building our company in Hawaii in support of local innovation and job creation.

To understand the concept of 'grid-interactive water heating', it is important to first understand that Hawaii's 100% renewable energy generation portfolio mandate is requiring Hawaiian Electric to integrate increasing amounts of intermittent renewable energy. The intermittent nature of renewable energy generation means that 1) electricity production is not always aligned with customer demand, and 2) there are often rapid fluctuations in generation as clouds pass overhead. So as Hawaiian Electric adds more renewable generation to Oahu's electricity system, they must also:

- 1) Add ways to store solar energy for delivery later in the day;
- 2) 'Smooth' the rapid fluctuations to maintain the stability of the power grid; and
- 3) Reduce total electricity demand during periods when renewable generation is not high (e.g., during the night) through energy efficiency or demand *shifting*.

As the Council is likely aware, grid-scale and customer-sited energy storage batteries are able to provide all of the above services and Hawaiian Electric is actively procuring solar and energy storage projects to do just that. But these batteries typically utilize lithium-ion chemistry, which is currently fairly expensive (preventing many homeowners from being able to purchase them) and present safety issues that make procurement, permitting, and deployment a challenge. Safe, inexpensive alternatives would enable rapid scaling of energy storage technology and the integration of renewables.

Enter Grid-Interactive Water Heating.

Water heater tanks are essentially large cylinders that store *thermal* energy, and there are hundreds of thousands of them across Oahu. Shifted Energy has developed an inexpensive, non-intrusive control device that can be attached to any electric water heater to convert it into a customer-sited battery. When deployed for apartment or condominium renters and owners, Shifted's controllers essentially transform the entire building into a giant battery simply by upgrading existing electric water heater assets. These batteries will then respond to control signals from Hawaiian Electric to support grid stability and renewable integration. Hawaiian Electric then compensates the host customer for the 'grid support services' that those water heaters provide and Shifted's intelligent software ensures that families always have hot water when they need it.

Because so many families already have such water heaters and the cost of the controller is low, including grid-interactive water heating in Bill 25 and the City and County electric codes ensures that hard-to-reach families can finally participate in and benefit from the clean energy revolution and Oahu can rapidly scale a cost-effective technology to support safe, low-cost renewable energy integration.

For the foregoing reasons, Shifted Energy **strongly supports** this measure.

Mahalo,



Forest Frizzell, CEO
Shifted Energy

From: CLK Council Info
Sent: Monday, July 22, 2019 6:57 PM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Alexandra Kahn
Phone 4102075560
Email vitalincmedia@gmail.com
Meeting Date 07-25-2019
Council/PH Committee Zoning
Agenda Item Support for Bill 25, "Relating to the Adoption of the State Energy Conservation Code"
Your position on the matter Support
Representing Organization
Organization Vital Inc.
Do you wish to speak at the hearing? No

Written Testimony

I am in full support of Bill 25 as it is an essential component of Hawaii fulfilling its commitment to be 100% renewable energy. If we are to be a state leader in sustainability, how every building is built and updated from here on out is of utmost importance. The best way to ensure corners aren't cut by builders who are lazy, cheap, or don't care, bills like this to update the building efficiency codes are necessary. Buildings are one of the greatest emitters of CO2 and increasing the standards will drastically decrease our carbon footprint. One of the greatest parts of this bill is that the commercial and multi-family developments be electric vehicle ready. All I want is an electric vehicle however my building doesn't have a charging station and there are not enough places to charge on the island in general because there are so many electric cars. The more stations we add as an island, the more people can switch to electric cars. Plus with massive complexes and areas like SALT going up left and right, we need to ensure they all have multiple charging stations for residents and customers.

Testimony Attachment

Accept Terms and Agreement 1

From: CLK Council Info
Sent: Monday, July 22, 2019 7:16 PM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Zachary A Mermel
Phone 8089871816
Email zach.mermel@gmail.com
Meeting Date 07-25-2019
Council/PH Committee Zoning
Agenda Item Bill 25 (2019)
Your position on the matter Support
Representing Self
Organization Ola Design Group
Do you wish to speak at the hearing? No

Written Testimony Dear ZPH Chair Menor and Committee Members,
I support Bill 25.
As a single-family homeowner, I would very much like to replace our electric water heater with a solar hot water system instead.
In our current era of ever more erratic climate chaos, we need to do everything in our power to curtail our use of fossil fuel based energy systems. Solar hot water systems are a clear choice for a future climate that is worth striving for.

Kindly do everything in your power to pass Bill 25.

Mahalo nui loa for the opportunity to testify.

Zach Mermel

Testimony
Attachment
Accept Terms and Agreement

1



July 22, 2019

Bill 25: Energy Code Update

Re: Hawaii Bill 25: EV Infrastructure Requirements

Dear: The Honorable Ron Menor, Chair of Members,

The Electrification Coalition is pleased to offer this letter of support for the Bill 25 Energy Code Update to help accelerate electric vehicle adoption and for Hawaii to achieve its goal of transitioning all transportation to renewable fuels by 2035.

The Electrification Coalition (EC) is a nonpartisan, not-for profit group of business leaders committed to promoting policies and actions that facilitate the deployment of electric vehicles on a mass scale in order to combat economic, environmental, and national security dangers caused by our dependence on oil. Electric Vehicles plug into a grid that is domestic, diverse, and can insulate our business and consumers from the volatile nature of oil prices.

The Electrification Coalition has supported EV ready requirements around the country as an important policy that can help accelerate EV adoption. Making charging more convenient and accessible to consumers by requiring small investments at the time of construction will save developers and consumers money while building access to essential infrastructure and powering the future of transportation.

We strongly support this effort by Hawaii to put in place policies that provide the foundation for higher rates of EV growth in the state.

If you have any questions, about this letter or the Electrifications role please don't hesitate to reach out.

Sincerely,

Benjamin Prochazka
Vice President - Electrification Coalition
303-717-3657
www.ElectrificationCoalition.org



July 22, 2019

Committee on Zoning, Planning, and Housing
Honolulu City Council
530 South King Street, Room 202
Honolulu, HI 96813-3077

Re: Support for City and County of Honolulu Bill 25 (2019)

Dear Honorable Chair Ron Menor and Members,

The Greenlink Group (Greenlink) would like to offer this letter in support of the passage of Bill 25 (2019) on the Adoption of the State Energy Conservation Code, with particular regard to the amendment of Subsection R403.5.5 of the IECC on solar water heating.

Greenlink is a partner to the City and County of Honolulu through Bloomberg Philanthropies' American Cities Climate Challenge (ACCC). We are a clean energy research consulting firm that specializes in energy efficiency, renewable energy, and urban sustainability. Our mission is to use our award-winning analytical technologies to help create smarter, cleaner, and more equitable communities.

As a part of ACCC, Greenlink was engaged to conduct analysis on the proposed R403.5.5 amendment, in which residential single-family buildings shall use solar, wind, or another renewable energy source for not less than 90 percent of the energy for service water heating. Our research has found that by 2050 in Honolulu, solar water heaters not only produced the lowest amount of total carbon emissions in comparison to electric resistance, instantaneous natural gas, and heat pump water heaters, but also were the least-cost options on a total and operating-cost basis for residents. Furthermore, when the social costs of water heating (defined as damages to public health and welfare caused by CO₂, VOC, NH₃, NO_x, and SO₂ pollutant emissions) were factored in to the policy analysis, solar water heaters remained the least-cost option in comparison to electric resistance and instantaneous natural gas water heaters.

Our analysis suggests that solar hot water heaters are the lowest economic and social cost option, therefore the amendment to R403.5.5 appears to be a financially and environmentally responsible option for Honolulu as it moves towards its goal of achieving 100% renewable energy on O'ahu by 2045. If you have any questions about Greenlink's analysis or support, please do not hesitate to reach out to us at info@thegreenlinkgroup.com.

Sincerely,

A handwritten signature in black ink, appearing to read "Matt Cox". The signature is stylized with a large, looped "M" and a cursive "Cox".

Matt Cox
CEO, Founder
The Greenlink Group



ELEMENTAL EXCELERATOR

**Written Statement of Elemental Excelerator
before the Honolulu City Council Committee on Zoning, Planning, and Housing
Thursday, July 25, 2019**

**In Consideration of Bill 25
Relating to the Adoption of the State Energy Conservation Code**

**Aloha Chair Menor, Vice-Chair Waters, and Members of the Council Committee on
Zoning, Planning, and Housing:**

Elemental Excelerator respectfully submits support for Bill 25, which regulates the design and construction of residential and commercial buildings for the effective use of energy through the adoption of the State Energy Conservation Code (2017), subject to local amendments by the City and County of Honolulu.

Elemental Excelerator is a Honolulu-based growth accelerator program founded and operating in Hawai'i. We have awarded over \$30 million to 82 companies resulting in 56 demonstration projects in Hawai'i & Asia Pacific. Each year, we evaluate over 500 companies and look for innovative entrepreneurs from around the world to come to Hawai'i and find transformative solutions to help us achieve our 100% clean energy goals and solve our most pressing environmental problems. We select 15-20 companies annually that best fit our mission and fund each company up to \$1 million.

In April 2018, Elemental Excelerator commissioned a study entitled *Transcending Oil: Hawaii's Path to a Clean Energy Economy*. The study found that in Hawai'i, transitioning to renewable energy is cheaper than sticking with oil. The faster we go, the cheaper it will be. As a policy recommendation, the study identified following through and enforcing current clean energy policies by fully funding and implementing building codes and standards. The report also found that *"Energy efficiency efforts increased over the past decade, led by Hawaii Energy's electric savings programs and a push to update building codes."*¹

We support Bill 25 for the following reasons:

1. **It is economically responsible:** According to a report by the National Institute of Building Sciences, for every \$1 invested in updating building codes, it yields an \$11 benefit. Updating building codes increase resiliency and mitigate potential costs that could come from natural disasters caused by climate change.²
2. **It opens up opportunities for innovation:** Updating our energy codes can address the rapid changes in technology that innovation has developed. In particular, the sections that provide guidance on grid interactive water heaters and electric vehicle charging

¹ Larsen, J., Mohan, S., Herndon, W., Marsters, P., & Pitt, H. (2018, May 01). *Transcending Oil: Hawaii's Path to a Clean Energy Economy*, p.13 and 37, Retrieved from <https://rhg.com/research/transcending-oil-hawaii-path-to-a-clean-energy-economy/>

² <https://www.nibs.org/news/432994/National-Institute-of-Building-Sciences-Issues-Interim-Report-on-the-Value-of-Mitigation-.htm>

infrastructure support the deployment of commercial ready clean energy innovation. About 17% of Elemental Excelerator's 82 portfolio companies, such as Hawai'i grown company Pono Home and Shifted Energy, focus on building efficiency, demonstrating an increased opportunity to attract innovation with forward-thinking policies such as Bill 25.

Mahalo for the opportunity to provide testimony.

Sincerely,


Dawn Lippert (Jul 23, 2019)

Dawn Lippert
CEO



Council of the City and County of Honolulu
City Hall, 530 South King Street
Honolulu, Hawai'i 96813

Committee on Zoning, Planning and Housing
Testimony in Support of Bill 25 (2019) - Relating to the Adoption of the State Energy
Conservation Code
July 25, 2019, 9:00 AM Hearing

Dear Chair Menor, Vice Chair Waters and Members of the Committee on Zoning, Planning and Housing:

Thank you for the opportunity to submit comments on Bill 25, Relating to the Adoption of the State Energy Conservation Code. The Hawai'i Energy program would like to testify in **strong support** for this item.

Hawai'i Energy works on behalf of the Hawai'i Public Utilities Commission (PUC) to empower island families and businesses to make smart energy choices to reduce energy consumption, save money, and pursue a clean energy future. We believe the new energy codes are critical in this effort and part of a global movement to make progress on climate change mitigation through codes and standards.

Energy efficiency remains the cheapest, cleanest energy resource today. The amended IECC 2015 will provide healthy and safe indoor environments while providing substantial bill savings for occupants over the life of the building, promote greater energy resilience and help Hawai'i reach our statewide commitment to reach 100% clean energy by 2045. In general, any building code is designed and reviewed for efficiency with cost- effectiveness in mind. Moreover, the Hawai'i amendments were carefully developed with the input of many agencies, organizations and the design and construction industry to minimize unintended consequences such as increased construction, materials and labor costs – while assuring occupants the benefits of high performance buildings that consume less electricity.

With the 2015 IECC already in effect for the City and County of Honolulu, important amendments can still be and should be adopted to modify the codes for best practices on the island and to ensure preparedness for the future. Amendments include sub-metering requirements for commercial tenants, automatic air-conditioning shut-off when lanai doors are opened in hotels and similar buildings, high efficiency or renewable water heating and electric vehicle charging infrastructure requirements.

Hawai'i Energy supports the amendments requiring basic electric vehicle infrastructure, recognizing the sizable cost advantage (between four to eight times less expensive) of having EV-ready capacity at the time of construction. However, Hawai'i Energy also sees missed opportunity by not requiring Level 2 charging infrastructure. As EV adoption increases, Bill 1585 which was signed by the governor this year gives rebates for workplace and multi-unit Level 2 EV chargers. Level 2 charging is emphasized because it significantly increases the ability of our grid to absorb solar generation throughout the day as opposed to Level 1 charging and additional convenience in faster charging times. This will ease the path toward electric vehicle adoption by reducing the cost to install post-construction and help realize the associated electrical grid and clean energy benefits. With the average residential building having a fifty year lifespan, the buildings being built today will have measurable impact on future generations.

Potential Benefits of the Fully Implemented Code

Rigorous analysis on the cost and energy saving implications of the code support its rapid adoption and implementation. For example, a 2015 study by the Pacific Northwest National Laboratory (*"National Cost Effectiveness of the Residential Provisions of the 2015 IECC"*), conducted specifically on Hawai'i's tropical climate zone residential option, estimated that compared to the old code, the prescriptive requirements for glazing and insulation would save \$1,252 in construction costs for a model 1,200 square-foot single family home. (This does not include the energy bill savings that would be realized immediately and over time). It is important that Oahu's homeowners have such efficient features 'baked-in' to the construction of their homes from day one, so that they can buy -- *and afford to stay in* -- their homes for generations, if they choose.

The Blue Planet Foundation, based on data provided by the Hawai'i State Energy Office, estimates that over the next 20 years, Oahu will save over **\$971,000,000** through the implementation of the 2015 code and the amendments in the subject Bill. This is money that can stay in the local economy rather than being used for fossil energy or imported renewable infrastructure.

The sensible energy code amendments in the proposed Building Energy Conservation Code of the City and County of Honolulu, represent a critical opportunity for Oahu to make a leap forward in the transition to 100% clean energy and will provide lasting economic benefits to residents and businesses who are already burdened with high costs. We encourage the Committee to pass the adoption of these provisions.

Thank you for the opportunity to testify. If you have any questions on Hawai'i Energy's programs or our work toward the adoption of stronger energy codes, please do not hesitate to contact me.

Sincerely,

Brian Kealoha
Executive Director

Speaker Registration/Testimony

Name Doorae
 Phone 8084923954
 Email dshin@oahu.surfrider.org
 Meeting Date 07-25-2019
 Council/PH Committee Zoning
 Agenda Item Bill 25
 Your position on the matter Support
 Representing Organization
 Organization Surfrider Foundation Oahu Chapter
 Do you wish to speak at the hearing? No

Aloha,

We support Bill 25 because energy efficiency & clean energy are vital to the future of our islands and protecting our people with policies that make us more resilient and prepared.

Written Testimony This also aligns well with both City & State goals for clean energy and climate action.

Mahalo,
 Doorae Shin
 Surfrider Foundation O'ahu Chapter Coordinator

Testimony
 Attachment

Accept Terms and Agreement 1



Healthy Climate
Communities

Testimony in support of Bill 25

COMMITTEE ON ZONING, PLANNING AND HOUSING

Hearing Wednesday, July 25, 2019

Aloha Chair Menor and Committee Members,

I am writing in strong support of Bill 25.

These concrete measures will help us achieve the important goals our City and our State have committed to in order to slow and eventually reverse Climate Change.

The Bill has well thought out and practical measures. However, I would urge one amendment: Please upgrade the requirement for EV chargers to be AC Level 2 ready. The investments should be appropriate for the actual future needs of residents who will be charging their vehicles.

Mahalo,

Dr. Lisa Marten

Executive Director
Healthy Climate Communities
healthyclimate@hawaii.rr.com



HAWAII LABORERS-EMPLOYERS COOPERATION AND EDUCATION TRUST
650 Iwilei Road, Suite 285 · Honolulu, HI 96817 · Phone: 808-845-3238 · Fax: 808-845-8300 · URL: hilecet.org

July 22, 2019

**HONOLULU CITY COUNCIL
COMMITTEE ON ZONING, PLANNING AND HOUSING**

**Committee Meeting Room
Honolulu, Hawaii 96813
DATE: Thursday, July 25, 2019
TIME: 9:00 a.m.**

TESTIMONY ON BILL NO. 25 (2019) – Relating to the Adoption of the State Energy Code

To Council Chair Emeritus Menor, Vice Chair Waters and members of the Committee:

Hawaii LECET is a labor-management partnership between the Hawaii Laborers' International Union of North America, Local 368, its' 5000+ members and its' 250+ unionized contractors. The Laborers' International Union of North America is the largest construction union in the United States with over 600,000 members.

Mahalo for the opportunity to testify in **SUPPORT** of **Bill No. 25**, Relating to the Adoption of the State Energy Code. Hawaii LECET supports the intent of Bill No. 25 and would like to request amendments as shown on page 2 in our testimony, to include concrete masonry and concrete walls in the building code to improve on the standpoints of energy efficiency and fire safety. Hawaii LECET would like to ensure that the sustainability and safety benefits of mass wall construction are recognized in the revisions of the State Building Codes, as these revisions will help to create codes that are tailored to Hawaii's unique climate, resulting in greater energy efficiency and cost savings.

Mahalo for the opportunity to testify.

With respect,

Hawaii Laborers-Employers Cooperation & Education Trust



HAWAII LABORERS-EMPLOYERS COOPERATION AND EDUCATION TRUST

650 Iwilei Road, Suite 285 · Honolulu, HI 96817 · Phone: 808-845-3238 · Fax: 808-845-8300 · URL: hilecet.org

C402.2.3 Thermal resistance of above-grade walls. The minimum R-value of materials installed in the wall cavity between framing members and continuously on the wall shall be as specified in Table C402.1.3, based on framing type and construction materials used in the wall assembly.

wood framed, metal framed, and mass walls

Exception: Continuous insulation for ~~wood and metal framed walls~~ are not required when one of the following conditions are met:

1. Walls have a covering with a reflectance of equal to or greater than 0.64 and/or overhangs with a projection factor equal to or greater than 0.3;
2. Walls have overhangs with a projection factor equal to or greater than 0.3. The projection factor is the horizontal distance from the surface of the wall to the farthest most point of the overhang divided by the vertical distance from the first floor level to the bottom-most point of the overhang; or
3. Concrete, concrete masonry units (CMU), and similar mass walls are six inches or greater in thickness.

The R-value of integral insulation installed in CMUs shall not be used in determining compliance with Table C402.1.3. Mass walls shall include walls:

1. Weighing not less than 35 psf (170 kg/m²) of wall surface area.
2. Weighing not less than 25 psf (120 kg/m²) of wall surface area where the material weight is not more than 120 psf (1900 kg/m³).
3. Having a heat capacity exceeding 7 Btu/ft²·F (144 ^{kJ} ege/m² · K).
4. Having a heat capacity exceeding 5 Btu/ft²·F (103 kJ/m²· K), where the material weight is not more than 120 pcf (1900 kg/m³).

Exception: ~~Concrete, CMU, and similar mass walls are six inches or greater in thickness.~~



July 23, 2019

Honolulu City Council
Zoning, Planning, and Building Committee
530 South King Street, Room 202
Honolulu, HI 96813

Dear Chairman Menor and Committee Members,

Aloha Charge is Hawaii's only company dedicated full-time to the sale and installation of electric vehicle charging equipment and I serve as the company's CEO. We are strongly in favor of Bill 25, and specifically the electric vehicle charging readiness provisions.

A dozen major countries around the world have already announced plans to ban the sale of petroleum-powered vehicles between 2025 and 2040, and some countries and cities have already planned the prohibition of the use of liquid fueled cars entirely. This has led a number of global automakers to also set a deadline to halt the production of fossil-fueled vehicles (for example, Mercedes-Benz has said their last liquid-fueled vehicle will be produced in 2039, and GM has said "our future is electric"). In other words, the end of gas and diesel-powered vehicles is in sight, and faster than most would expect.

As the largest reseller of EV charging equipment in the state, time and time again we have seen charging projects get stopped in their tracks, not as a result of hardware costs, but because of the high cost to retrofit properties with the infrastructure needed to install a charging system. Adding a pre-wiring component to new building codes is a logical, and frankly, sorely needed step in the right direction.

It is also not a new idea. Communities across the nation from Los Angeles to Denver to Maryland are adding this requirement into their building codes and the benefits are paying off sooner than anticipated. For example, in 2016 the City of San Francisco calculated the installation cost of EV charging in new construction was \$920 per stall, while the cost of retrofitting was \$3,550 per stall, a factor of almost 4x. And that is for a full installation. The cost of just making sure the conduit and electrical capacity is in place is even less.

In addition, by having this provision in code, it forces architects and engineers to think about putting electric rooms in a convenient location for future growth. Not long ago I visited an apartment building that was only about 2 years old, but the electric rooms were buried deep in among the apartments, which made it cost prohibitive to run circuits to the garage.

As a contrast, I had the opportunity to visit an office complex in Palo Alto, California last week that was built after that community established pre-wiring mandates. Only a few years after opening with a dozen charging stations, demand is already calling for the addition of a dozen more. The good news in this case is that the building already has the conduit and empty service panels in place, ready to be filled. The electric room is in the garage and not only can service today's needs, but already has a pad for an additional transformer and a massive but empty distribution panel in place for when the time comes to expand further.

1288 Ala Moana Blvd., Suite 1A
Honolulu, HI 96814
(808) 450-2111
www.alohacharge.com

In almost every case nationwide, developers balk at this concept, yet are grateful they pre-wired their buildings only a few years later when the time comes to add charging equipment.

Given our experience, we strongly urge the City Council to adopt Bill 25. Your children will thank you for making their conversion to electric mobility easier.

Regards,



Jim Burness

From: CLK Council Info
Sent: Tuesday, July 23, 2019 9:15 PM
Subject: Zoning, Planning and Housing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Noel Morin
Phone 8089877428
Email nmorin99@yahoo.com
Meeting Date 07-25-2019
Council/PH Committee Zoning
Agenda Item Bill 25, Agenda Item 7
Your position on the matter Support
Representing Organization
Organization Big Island Electric Vehicle Association and Hawaii Electric Vehicle Association
Do you wish to speak at the hearing? No

To: The Committee on Zoning, Planning and Housing
From: Noel Morin, Big Island Electric Vehicle Association; Hawaii Electric Vehicle Association
Date: Thursday, Jul 25, 2019
Dear Zoning, Planning, and Housing Chair and Committee Members,

I strongly support Bill 25. It will offer Hawaii residents the opportunity to reduce their energy-related bills, increase their ability to utilize electric vehicles, and (importantly) enable a more rapid transition to a clean energy future.

Written Testimony

I lead the Big Island Electric Vehicle Association and the Hawaii Electric Vehicle Association. I have first-hand experience with electric vehicle ownership and the barriers to their adoption. A key barrier is charging infrastructure. At less than 1% electric vehicle adoption, we're already seeing supply challenges with the charging stations that exist. This is especially pronounced for multi-unit dwellers. Bill 25 will enable the introduction of charging stations in a dramatic way. By incorporating the requirement to enable EV-charger readiness into the planning process, property owners will be able to avoid costly retrofits later.

I strongly recommend that we amend the details in subsection C406.8. The language refers to Level 1 charging being the minimum requirement. Level 1 charging is painfully slow – it can take days to charge some of our electric vehicles! Additionally, it will minimize the overall capacity of the infrastructure – there will be fewer electric vehicles that can be serviced by a given charging station.

The electrification of transportation and the shift to renewable sources of energy are critical tactics in our journey towards sustainability. Given the increasingly urgent nature of our climate crisis, we must do all we can to execute these tactics.

Thanks for the opportunity to share my testimony and for your consideration of my recommendation.

Sincerely,
Noel Morin

Testimony
Attachment

Accept Terms and 1
Agreement



183 Pinana St., Kailua, HI 96734 • 808-262-
1285 • info@350Hawaii.org

To: The Committee on Zoning, Planning and Housing
From: Brodie Lockard, Founder, 350Hawaii.org
Date: Thursday, July 25, 2019

In strong support of Bill 25

Dear Chair Menor, Vice Chair Waters, and Members of the Zoning, Planning and Housing Committee,

350Hawaii.org writes in strong support of Bill 25, mainly because of the solar water heater and electric vehicle (EV) requirements in items 17, 28 and 31. These sections of the bill are essential not just because they will reduce the greenhouse gas emissions that are killing countless forms of life all over Earth, but because they will have a major impact on the long-term affordability of living in Hawaii.

Whether you support these provisions translates to this: will you allow renters and homeowners to save money in the long term, or will you give big developers and Hawaii Gas more profits, *and* approval to burn more fossil fuels than they already do?

The practicality and economic benefits of solar water heating are obvious. Paying a permanent monthly bill for natural gas to heat water in Hawaii is absurd. Solar water heating pays for itself in three or four years, and residents don't have a monthly gas bill. Ever.

Gas water heaters benefit no one but Hawaii Gas. They are an anachronism hindering us from making the emissions cuts we need to reach our clean energy goals. Defending the natural gas industry and its employees is like defending the tobacco industry and its employees. Besides, this bill applies only to *new* buildings. If someone has a job in the gas industry now, they will still have it after Bill 25, serving every existing gas customer.

Concerning the EV infrastructure requirement: EVs are coming fast and hard. Volkswagen says it will stop making gas-powered cars entirely in 2026 [1]. Mercedes-Benz, Volvo, and Jaguar Land Rover will change their entire vehicle lines to EVs and EV hybrids by 2022. GM will drop all their gas-powered vehicles by an unspecified date. Ford, Toyota, Mazda, and the Renault-Nissan-Mitsubishi alliance are all spending billions on EV technology, and will each introduce from 10 to 50 new EV models within the next one to seven years [2].

[1] <https://fortune.com/2018/12/05/volkswagen-ending-gas-powered-cars/>

[2] <https://mashable.com/2017/10/03/electric-car-development-plans-ford-gm/>

The need for more EV charging stations on Oahu is glaring. The easiest and cheapest place to add them is in new building construction. The easiest place to use them is at home.

Volvo found in February that 51% of EV drivers charge their cars at home; only 16% charge at work [3]. Nearly every Hawaii resident will eventually have an EV and need somewhere to charge it. Will they be forced to somehow pay to install the electrical equipment needed to charge at home? How will they afford that?

Under item 17 of Bill 25, new residential multi-unit buildings with eight or more parking stalls must have at least 25% of the stalls ready for EV chargers. Per the Honolulu Office of Climate Change, installing during construction costs \$920 per stall; retrofitting after construction costs \$10,273 per stall.

Under item 31, a dedicated receptacle for an electrical vehicle must be provided for each new residence. Again, this is far less expensive during construction. Don't force new homeowners to spend thousands of dollars to retrofit their homes for the EVs they will be driving in the 2020s or 2030s.

Big developers are objecting to this extra expense. Will they *really* suffer from such a tiny dent in their enormous profits? Are they going to stop building in Hawaii because they have to spend \$920 more on each parking stall? Of course not.

Beyond the modest but crucial requirements in items 17, 28 and 31, 350Hawaii.org asks the committee to carefully consider two amendments:

1. Change all the Level 1 EV charging language to Level 2.
2. Refine the definition of "RENEWABLE ENERGY" on page 5.

1. Level 1 EV charging

Level 1 charging is distressingly inadequate for the many drivers who would like to use an EV daily for a long commute. Level 1 provides only about four miles of driving range per hour of charging. That severely limits range, to perhaps 50 miles, depending on the specific car. And if you go anywhere after work, you lose both voltage and charging time. Level 2 charges three to four times as fast, and according to Tesla, who would know, Level 2 costs only a few hundred dollars more to install during construction than Level 1. Compared to other looming climate-related costs, this is miniscule.

Volvo also found that slow ***Level 1 charging is keeping people from buying EVs***. Fifty-eight percent of consumers have avoided buying one because of "range anxiety": fear that their battery will die before they find a charging station [3]. Range anxiety is the primary reason people aren't buying EVs. A

[3] <https://www.media.volvocars.com/us/en-us/media/pressreleases/248305/poll-finds-americans-feel-electric-vehicles-are-the-future-of-driving>
dearth of charging stations is second, at 49%.

If most people charge at home (51%, recall) and they're afraid their Level

1 charging can't get them safely through their day, they're not going to choose an EV. Range anxiety is a major barrier to large scale adoption of EVs [4][5]. Hawaii's clean energy goals demand that we adopt EVs heavily and quickly, and Level 1 is not sufficient.

When people experience Level 1's delays, many will want Level 2, costing them unnecessary money and trouble to upgrade themselves.

Level 2's faster charging will have another very important benefit: charging is more likely to be mostly completed during daylight hours, increasing the percentage of solar energy used for charging.

Jurisdictions across the U.S. are already standardizing building requirements to Level 2 in recognition of Level 1's limitations. Hawaii should be leading this trend, not playing catch-up.

2. "RENEWABLE ENERGY"

This term has been co-opted by entities whose activities technically meet the State's definition, but in practice do immeasurable harm to the environment in a mind-boggling variety of ways.

Currently, this deceit is exemplified most egregiously by the Hū Honua Bioenergy plant on Hawaii Island. Hū Honua proposes to [6]:

- Cut five acres of trees per day, adding up to thousands of acres of trees across the island;
- Drive five or six logging trucks per hour (on "light" days) to their power plant in Pepe'ekeo (the County struggles to maintain these roads and bridges with current traffic);
- Burn the trees, releasing about 300,000 tons of greenhouse gas emissions per year, as well as additional pollutants affecting air quality along the coast;
- Draw 21.6 million gallons of water per day from the Hakalau aquifer to cool the turbines (the entire district of North Kona consumes only half that);
- Add over two dozen hazardous chemicals to the water to clean the turbines;
- Inject the used water into 800-foot deep injection wells 80 feet from the edge of geologically unstable cliffs;
- Allow the hot, contaminated water to rise up through the ocean seabed to directly impact coral reefs and critically endangered Hawksbill turtles;
- And finally, overcharge for electricity—double the current cost of solar power, which is dropping exponentially worldwide.

[4]

https://www.researchgate.net/publication/224880220_Sustainable_transportation_based_on_electric_vehicle_concepts_a_brief_overview

[5] <http://www.innovations.harvard.edu/cache/documents/11089/1108934.pdf>

[6] <https://www.malamahamakua.org/>

Under the definition in Bill 25, this litany of environmental horrors is, legally, "renewable energy." But would anyone imagine that the term is meant to describe such a nightmare?

To prevent such atrocious misuse of the term, 350Hawaii.org requests that

source 7 in the definition of **RENEWABLE ENERGY** in SECTION 3(11) be amended as follows (**bold and underlined** indicates additions):

7. Biomass, including biomass crops **the use of which would not produce significant net lifecycle greenhouse gas emissions or cause any other significant environmental harm**, agricultural and animal residues and waste, and municipal solid waste and other solid waste;

Thank you for the opportunity to share our views. We trust you will legislate in favor of life on Earth, and the long-term cost of living in Hawaii.

Brodie Lockard
Founder, 350Hawaii.org

July 24, 2019

The Honorable Ron Menor, Chair, and Members
Committee on Zoning, Planning and Housing
Honolulu City Council
530 South King Street, Room 202
Honolulu, Hawai'i 96813



SUBJECT: Testimony Supporting Bill 25 (2019)

Dear Chair Menor and Committee Members:

On behalf of the Natural Resources Defense Council (NRDC), which has 2.4 million members and online activists, more than 2,000 of whom are residents in the City of Honolulu, I am writing to request your support for Bill 25 (2019), which adopts the Hawai'i State Energy Code and 2015 International Energy Conservation Code (IECC), with local amendments. Cities and counties across the country are on the front lines of both the impacts and solutions to the climate crisis. Building codes are a commonsense and powerful tool cities can use to accelerate the transition to a clean energy economy and ensure we collectively meet critical emissions reductions goals set forth in the Paris climate agreement—an agreement the state and Honolulu have both joined.

As you know, Honolulu residents are already feeling many of the effects of climate change, from more frequent hurricanes and rising seas to record high temperatures and rain bombs. Your support of Bill 25 will help lead the way toward a more stable climate and a more resilient city.

Among the many positive benefits in the City and County of Honolulu's ("the City") proposed code update, two primary provisions will significantly help the City meet its ambitious carbon pollution reduction goals:

- (1) Requiring homes be electric vehicle (EV)-capable for Level 1 charging, and requiring 25% of multi-unit and commercial parking stalls to be EV-ready for Level 1 and 2 charging respectively.
- (2) Requiring solar hot water heating for newly constructed single-family homes, with certain exemptions in cases that are not economically viable.

These are proven and cost-effective measures. In fact, especially given Hawai'i's unique vulnerability to and leadership on climate change, we'd like to see Honolulu go even further, such as by phasing in a requirement for all new developments to be equipped with Level 2 chargers.

Not only will implementing these measures reduce emissions from homes and promote EV use, the City will be helping to lower long-term costs for residents, build more efficient and healthy homes, and meet its ambitious goals to solve the climate crisis.

The following summarizes our support for these two key measures, including the reasons for our strong endorsement of these code updates.

Energy Code Updates Save Energy and Make Sense

Ongoing code updates help residents save energy and associated costs and emissions. For instance, a six-year old home that was constructed to the 2006 International Energy Conservation Code instead of the proposed 2015 code version would use approximately 33% more energy than needed from the date of construction and into the future.

Harnessing the Sun for Hot Water Reduces Emissions—and Saves Money

1. Saving emissions and increasing resilience:

Solar hot water heating will be a critical element to meet the City's commitment of 100% renewable energy by 2045 and help reduce the 9% of O'ahu's carbon emissions that come from residential energy use.ⁱ Solar hot water systems are both environmentally and economically beneficial, particularly in Hawai'i where electricity and natural gas prices are among the highest in the U.S., as is solar energy potential.ⁱⁱ Ensuring greater adoption of solar for all uses helps to reduce O'ahu's high use of imported oil, which has historically resulted in Hawaii being the state with the highest U.S. retail power prices--and build energy resilience and self-sufficiency.

2. Reducing costs:

Despite the higher up-front costs of installing solar hot water heating, solar hot water heating systems have a faster payback period than conventional natural gas water heating. This is because of the lower ongoing utility costs for consumers. Over the lifetime of a solar hot water system, compared to gas or other alternatives, this will help O'ahu consumers save thousands of dollars.

Requiring these updates in new homes will help ensure that future renters and/or owners are not locked into a water heater option that costs much more over time.

Based on modeling completed by The Greenlink Group, assuming average hot water demand in new homes in Honolulu, closing the solar hot water loophole in Honolulu's Building Code would result in **\$1 billion in environmental and cost savings for Oahu's economy at large.**

EV-Readiness Accelerates Clean Transportation and Lowers Charging Costs

1. Reducing Emissions from Transportation

EV-readiness in new construction is an essential ingredient to support the City's commitment to transform all ground transportation to renewable fuels by 2045. On-road transportation accounts for 21% of O'ahu's polluting carbon emissions.ⁱⁱⁱ EVs are expected to reach cost parity

with gas-powered cars in the early 2020s—and today, used EVs are very affordable. Already, Honolulu has 8th highest EV market share in the nation, and Hawai'i has the 2nd highest EV adoption rate per capita in the country.^{iv}

Cities must get their infrastructure ready to meet that demand.

2. Lowering Costs

EV-ready building codes are one of the most effective and low-cost methods for cities to promote electric vehicle use. Retrofitting O'ahu's parking spaces with charging stations to accommodate the EV future would be far more costly than requiring readiness up front. Multiple studies nationally have found that the avoided cost associated with requiring EV-ready in new construction ranges from \$2,000 to \$5,000 per parking space.^v

3. Going Further


EV-ready charging infrastructure should be available for all residents, not just those in single-family homes, which is why we're appreciative of the City's efforts to require EV-ready parking spaces at multi-unit sites and commercial buildings.

Honolulu is proposing Level 1 charging for single-family households, which is a good step, but a basic one, and we would encourage the City to go further to provide for Level 2 charging. To fully charge a car with a Level 1 charger requires 18 hours. We strongly recommend requiring Level 2 charging capacity in single-family homes.

To protect and promote the health, safety, resiliency, and economic prosperity of Honolulu and its residents, we urge you to support Bill 25(2019).

Thank you for the opportunity to submit these comments.

Sincerely,



Maria Stamas
Buildings Strategist, Resilient Communities Program
Natural Resources Defense Council

ⁱ [https://www.honolulu.gov/rep/site/ccsr/City and County of Honolulu Annual Sustainability Report 2019.pdf](https://www.honolulu.gov/rep/site/ccsr/City%20and%20County%20of%20Honolulu%20Annual%20Sustainability%20Report%202019.pdf)

ⁱⁱ https://www.eia.gov/dnav/ng/ng_pri_sum_a_EPG0_PRS_DMcf_m.htm

ⁱⁱⁱ [https://www.honolulu.gov/rep/site/ccsr/City and County of Honolulu Annual Sustainability Report 2019.pdf](https://www.honolulu.gov/rep/site/ccsr/City%20and%20County%20of%20Honolulu%20Annual%20Sustainability%20Report%202019.pdf)

^{iv} <https://www.bizjournals.com/pacific/news/2018/11/16/honolulu-among-top-10-electric-vehicle-markets-in.html>

^v <https://www.documents.dgs.ca.gov/b5c/2015TriCycle/CAC/Green/Exhibit-B-CARB-Cost-Analysis-and-Technical-Report.pdf>; <http://evchargingpros.com/wp-content/uploads/2017/04/City-of-SF-PEV-Infrastructure-Cost-Effectiveness-Report-2016.pdf>; <https://energy-solution.com/wp-content/uploads/2016/09/PEV-Infrastructure-Cost-Effectiveness-Summary-Report-2016-07-20b.pdf>



July 23, 2019

Meeting Date: July 25, 2019

Agenda Item: Bill 25

Position: OPPOSE

Chair Emeritus Menor, Vice Chair Waters and members of the Committee,

I am testifying in opposition of Bill 25, relating to the adoption of the state energy conservation code, in its current form.

As part of the measure, Bill 25 would require new homes to be built with solar water heaters, taking away homeowners' options to use more economical gas water heaters.

Today we're talking about gas water heaters in homes, but it's just a matter of time before focus shifts elsewhere. Our restaurants rely on natural gas to prepare so many of our meals. As a restaurant owner, natural and renewable gas outperforms electricity in food preparation quality and quantity. It is reliable and cost-effective. During the all day electric outage a few years ago caused by an earthquake, gas equipment enabled us to prepare over 2,000 meals and feed residents who could not cook or find cooked food. If we were forced to make the switch from gas to electric in the future, it could essentially put us out of business. Our restaurants are maxed out when it comes to electric capacity. I do not believe forcing restaurants to make that change down the line would have the positive effect Bill 25's supporters would have you believe it will.

When it comes to moving toward a cleaner future, focusing on capturing renewable gas currently escaping into the atmosphere from existing biomass and carbon waste generated by restaurants, landfills, natural and commercial composting would be a significant way to reduce greenhouse gasses without putting financial strain on homeowners or businesses.

Without the natural gas distribution infrastructure, the incentive to develop and capture renewable gas will be significantly reduced. I strongly urge you to vote no on Bill 25.

Sincerely,

A handwritten signature in black ink that reads "Thomas H Jones".

Thomas H Jones
President
REI Food Service, LLC



d.b.a. Gyotaku Japanese Restaurants

Name: **BARKER KAPPELLE CONSTRUCTION, LLC**
Email: **INFO@BUILDHAWAII.ORG**
Phone: **(808)664-9212**
Meeting Date: **July 25, 2019**
Agenda Item: **Bill 25 (2019)**
Position: **OPPOSE**

Chair Emeritus Menor, Vice Chair Waters and members of the Committee,

We are testifying in **opposition** of Bill 25 (2019), relating to the adoption of the state energy conservation code, in its current form.

Bill 25 (2019) was not written with the best interests of our business, our clients, or thousands of Hawai'i homeowners in mind. Simply put, what works for one household may not work for another, may not work for every space, or more importantly every budget, and we believe that homeowners should have a choice in the way they heat their water. Bill 25 takes that choice away.

Forcing homeowners to replace their gas water heater with solar comes at a higher cost than is shown on paper. It is a serious investment that homeowners should not be forced into. Solar comes with a higher up-front cost, and takes years for any real financial benefit to occur. Not to mention that for the space and planning required, this system cannot be used to power other electrical devices other than heating water.

Aside from a financial standpoint, solar heating effectiveness and output is highly dependent on the hours of sunshine any given area gets during the day. Our climate, especially on the windward side, is unpredictable. So, how environmentally friendly and efficient is a solar water heater that constantly requires electricity for back-up?

We are green builders, all for environmental awareness, reducing emissions and the effects of climate change, but we don't believe that solar heating systems for single-family homes are advanced enough at this time to be the only option available outside of electric. Living and building in Hawai'i is costly enough for families, we need to find this balance in other ways.

Mahalo,

Jessica Botti
Project Coordinator
Barker Kappelle Construction

July 23, 2019

The Honorable Ron Menor, Chair
and Members
Committee on Zoning, Planning and Housing
Honolulu City Council
530 South King Street, Room 202
Honolulu, Hawai'i 96813

Dear Chair Menor and Committee Members:

SUBJECT: Bill 25 (2019) Testimony

Thank you for the opportunity to provide testimony by way of technical expertise of Bill 25 (2019), which adopts the Hawai'i State Energy Code and 2015 International Energy Conservation Code ("IECC"), with local amendments.

The American Council for an Energy-Efficient Economy ("ACEEE"), a nonprofit, 501(c)(3) research organization, serves as a catalyst to advance energy efficiency policies, programs, technologies, investments, and behaviors. We are working for a future in which energy efficiency helps the United States achieve economic prosperity, energy security, and a healthy environment.

Our research finds that the value of energy efficiency in properly implemented construction standards is the easiest and most cost-effective way to help consumers save energy and money, making housing more affordable and reducing air pollution. All these benefits are difficult or impossible to capture if not taken into consideration at the time of construction.

Among the many positive benefits in the City and County of Honolulu's ("the City") proposed code update, two primary provisions will help the City advance energy efficiency and meet its ambitious carbon pollution reduction goals:

1. Require that homes be electric vehicle ("EV")-capable for Level 1 charging, and 25% of multi-unit and commercial parking stalls to be EV-ready for Level 1 and 2 charging respectively.
2. Require solar hot water heating for newly-constructed single-family homes, with certain exemptions in cases that are not economically viable.

Implementing these proven and cost-effective approaches to reduce emissions from homes and promote EV use helps cities encourage lower long-term costs for residents and build more efficient and healthy homes. Cities are adopting such strategies in efforts to reach their ambitious goals to combat the climate crisis.

Thank you for the opportunity to submit testimony regarding Bill 25 (2019). Should you have any questions, please feel free to contact us at:

Lauren Ross, PhD
Local Policy Program
American Council for an Energy-Efficient Economy
202-507-4039
aceee.org



**City Council
City and County of Honolulu
Committee on Zoning, Planning and Housing
July 25, 2019 at 9a.m.
Bill 25 (2019)**

Aloha Chair Menor, Vice Chair Waters, and Members of the Committee:

Tesla appreciates the opportunity to submit this testimony regarding Bill 25 (2019) which would modify the Honolulu Energy Code to establish an EV-ready infrastructure requirement. As discussed below, while Tesla supports the bill's intent, we believe it should be amended such that the EV- ready infrastructure deployed, whether in the residential or commercial context, can support Level 2 charging.

As Honolulu seeks to reduce its dependence on fossil fuels through transportation electrification, measures like Bill 25 (2019), which recognize that initial construction is a cost-effective and key opportunity to support access to EV charging, are of significant importance. Absent convenient and widespread access to EV charging, the willingness of individuals to purchase an electric vehicle will be limited. Parking spaces where customers already park their vehicles for 8-10 hours, like at their place of residence or work, are ideal candidates for the deployment of Level 2 charging infrastructure, which is sufficient to allow EVs with a range over 200 miles to fully, or near-fully, charge.

This has been recognized by a growing number of municipalities including the cities of Seattle, Vancouver, Atlanta, San Francisco, and Oakland, each of which have adopted a Level 2 EV-ready requirement akin to what is being proposed here. However, Tesla is very concerned that the residential and multi-unit dwelling requirement as drafted in this measure, which only directs the deployment of EV-ready infrastructure sufficient to support Level 1 charging, is inadequate to support the needs of EV drivers.



Level 1 charging, or “trickle charging”, means charging an EV using a standard 120 volt outlet. The rate of charge associated with this is roughly 4 miles of range per hour of charging. This charging rate is impractical and would likely force EV drivers to supplement their home charging with another charging option or source. This necessarily complicates life with an EV and thus, in Tesla’s view, will do nothing to promote or support a household’s decision to purchase an EV, given that few if any customers will be willing to sacrifice anything in terms of convenience to do so. To the degree the intent of the proposed amendments is to ensure that buildings are constructed in a manner that can effectively support the decision of Honolulu residents to purchase an EV, this particular provision needs to be changed to require Level 2 charging.

Below is a comparison of the time it would take to charge some of the most commonly purchased EVs from a zero state of charge to full, from Level 1 vs. Level 2 charging infrastructure:

Vehicle Make/Model	Range (miles)	Time to Charge (Hours)	
		Level 1	Level 2
Nisan Leaf - 62 kWh	226	57	9
Chevy Bolt	238	60	10
Tesla Model 3 - Standard Range	240	60	10

Notably, the time to fully charge an EV using Level 2 charging falls within the typical dwell time that a vehicle would typically be parked on a daily basis, whether at home or at work.

It is especially important to get this right in the multi-unit residential context, where to date, limited access to charging renders EVs impractical for the vast majority of those Honolulu residents that do not live in single family housing. Unlike the case for those living in single family housing, occupants in multi-unit buildings do not typically have the authority or means to deploy charging infrastructure. Furthermore, the costs of retrofitting this infrastructure in an existing parking facility is extremely high. As a result, by limiting the residential and multi-unit building requirement to Level 1 charging, the proposed EV ready



requirement will likely perpetuate the status quo, where EVs will continue to be a viable option for only a small segment of the population.

Tesla estimates that the cost difference between Level 1 and Level 2 EV-ready infrastructure is relatively small, on order of a few hundred dollars. When that differential is compared to the overall costs of constructing a new building or parking facility, it is truly de minimis. It seems more than reasonable to incur this modest upfront increase in costs, given the dramatically improved level of service provided by Level 2 charging and its ability to meaningfully support and drive EV adoption.

To address Tesla's concerns, the proposed language in Bill 25 relating to Subsection C406.8 should be modified as follows (underlined indicates additions, ~~strikethrough~~ indicates deletions):

C406.8 Electric vehicle infrastructure. New residential multi-unit buildings that have eight or more parking stalls, and new commercial buildings that have twelve or more parking stalls, shall be electric vehicle charger ready for at least 25 percent of the parking stalls. As used in this section, "electric vehicle charger ready" means that sufficient wire, conduit, electrical panel service capacity, overcurrent protection devices and suitable termination points are provided to connect to a charging station capable of providing simultaneously an AC Level 1 ~~2~~ charge per required parking stall ~~for residential and multi-unit buildings. For commercial buildings, at least 25 percent of the parking stalls are required to be AC Level 2 charger ready.~~ Charge method electrical ratings are provided below:

CHARGE METHODS ELECTRICAL RATING

Charge Method	Normal Supply Voltage (Volts)	Maximum Current (Amps – Continuous)	Supply Power
AC Level 1	120V AC, 1-Phase <u>120V AC, 1-Phase</u>	12A <u>16A</u>	120VAC/20A <u>(12-16A continuous)</u>
AC Level 2	208 to 240V AC, 1-Phase	≤ 80A	208/240VAC/20-100A (16-80A continuous)



Tesla thanks the Committee on Zoning, Planning and Housing Council for the opportunity to submit this testimony.



1707 L St. NW | Suite 1050
Washington, DC 20036

202.525.2883

IMT.org

DATE: June 20, 2019

TO: Committee on Zoning, Planning and Housing
Honolulu City Council
530 South King Street, Room 202
Honolulu, Hawai'i 96813

RE: Bill 25 (2019); Relating to the Adoption of the State Energy Conservation Code

The Honorable Ron Menor, Chair, and Members of the Committee on Zoning, Planning and Housing:

Thank you for the opportunity to provide comments on the proposed amendments to the 2015 IECC for Honolulu. The Institute for Market Transformation (IMT) is a nonprofit organization with national reach that works to improve the energy efficiency of buildings to help owners, occupants, cities, and utilities save money, increase property values, create jobs, reduce harmful pollution, and create healthier spaces. We are writing today in support of the adoption of the 2015 IECC with proposed local amendments.

By adopting the 2015 Energy Conservation Code, Honolulu could see a 25% reduction in energy used by new commercial buildings, and approximately 17% reduction in new residential buildings, along with increased reductions across renovations and retrofits that touch building systems compared to the previous code. This is a critical step in achieving the U.S. Department of Energy estimated energy cost savings for Hawaii of \$69 million annually by 2030.

In particular, IMT would like to express support for two proposed amendments: solar water heating and electric vehicle infrastructure. Water heating accounts for between 13-20% of a home's energy usage. By turning this demand over to renewable energy, high efficiency heat pump water heating or grid-integrated systems, Honolulu can reduce stress on energy infrastructure systems. Homeowners will benefit from increased savings immediately, and in the long term avoid cost volatility in energy markets for this portion of their utility bills.

Electric vehicle (EV) market adoption is on the rise, and most estimates indicate that 90% of

the cars on the road by 2050 will be EVs. Buildings that are built today without adequate infrastructure will not be able to support this shift in our vehicle fleet in the future without costly retrofits. The 2021 IECC Commercial Code Development Committee acknowledged this shift by accepting a new requirement for EV charging in commercial buildings by mandating both EV capable and EV ready spaces. This small change will help Honolulu reach its 100% renewable fueled transportation goal by 2045 by beginning to remove barriers to EV ownership now.

Looking toward Honolulu's climate goals, these amendments will additionally lead to decreases in greenhouse gas emissions, and cleaner indoor environments which have been linked to increased productivity by the reduction in employee sick days, and decreases in childhood asthma which have ripple effects on the education and growth potential of Honolulu's next generation.

IMT is committed to promoting energy efficiency, green building and environmental protection in the United States through more than 20 years of work that addresses market failures that inhibit investment in energy efficiency and sustainability in the building sector. Adoption of and compliance with improved energy codes is a critical piece of achieving these goals. I urge you to support the adoption of the 2015 IECC and proposed amendments. Please do not hesitate to contact me if you have any questions or wish to discuss these issues further.



Kimberly Cheslak
Energy Codes Specialist
Institute for Market Transformation
Direct: 240.676.1681
Email: kimberly.cheslak@imt.org



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Testimony to the Honolulu City Council
City & County of Honolulu
Committee on Zoning and Housing
Thursday, 9:00am, July 25, 2019

Re: Bill 25, 2019 Relating to the Adoption of the State Energy Conservation Code

Chair, Vice Chair, and Members of the Committee,

My name is Anthony Borge, Director of Business Development with RMA Sales. We are a locally-owned and managed kamaaina company since 1961. We manufacture and distribute louver jalousie windows, security and storm screens through a network of dealers, hardware stores and contractors throughout the state of Hawaii

I am here today to request that louver jalousie windows be **exempt** from the proposed code.

The intent/purpose of the energy code is to regulate the design and construction of residential and commercial building for the “**effective use of energy**” through the adoption of the State Energy Conservation Code 2017.

Bill 25, under Section 3, subsection R401.2.1 Tropical zone of the SECC and Table R402.2.1 will do the opposite of the stated purpose of the bill and create a **negative, detrimental effect** on the economic viability and environmental benefits of the louver jalousie window system and its subsequent decline usage based on the following:

Application:

- Covers dwellings below the 2400 ft. elevation
- Not more than half dwelling unit's area is air conditioned
- The dwelling is not heated

Facts:

The required weighted average SHGC of .30, .40 with monolithic glass cannot be achieved unless costly add-ons to the dwelling is provided. For example: extended roof eaves, exterior sunshades, trees, shrubs, solar/sun screens. FYI, the solar/sun screens listed as options *will reduce natural ventilation by as much as 90%* negating the purpose of using louver jalousie windows.

Monolithic glass, unlike insulated glass (two pieces of glass, air space in the middle, inner pane coated with Low E), performs poorly in SHGC performance. The technology to improve the SHGC performance with single pane, monolithic glass to be comparable with insulated glass is not available.

The minimum air leakage of 1.2cfm per square foot (6.1 L/s/m²) for louver jalousie windows is not reasonable nor justified for a passive, naturally ventilated dwelling under the Tropical Code. The mere design of the louver jalousie window with ¼" (6mm) thick glass blades overlapping a ½" on the adjacent glass blades, providing glass on glass contact is very difficult. Dirt, debris on the glass blades, settling of the dwelling, will result in out-of-plumb/square openings that will prevent the glass blades from closing properly to comply with the 1.2 cfm per square foot leakage requirement.

The louver/jalousie window was designed and built to provide **maximum ventilation** within the window opening. There is no surrounding frame around the glass with weather seals to provide an air tight seal when closed like sliding, hung, casement, awning window.

Increased Cost Unfavorable to Louver Jalousie Window Systems

The proposed SHGC requirement would increase the cost of a louver/jalousie window system over a dual glazed, Low E, horizontal sliding window. This will economically force homeowners to purchase the cheaper window system that will probably require mechanical ventilation (air conditioning) with respect to unconditioned homes. Please see the cost comparisons below:

Vinyl surround frame, 4" louver jalousie window 5.0 x 3.0 with standard clear glass

\$902 per unit X 20 units (avg. per home) = **\$18,902**

Total Cost with Low E glass blades = **\$21,000**

Cost Per Square Ft. = \$60.13/\$70.00

Vinyl surround dual glazed vertical/horizontal sliders with Low E, I.G glass

\$312 per unit X 20 units (avg. per home) **\$6,240**

Cost Per Square Ft. = \$20.80

Single glazed standard clear glass has a SHGC of .90. Single glazed, hard-coat low e glass has a SHGC of .65, a difference of .25. That mere .25 gain in SHGC will cost 4 times more than the similar sized standard clear glass. The current cost of a jalousie louver window

system already exceeds the cost of the comparable sized dual glazed, low e sliding vinyl window by a 3 to 1 ratio.

Please note that the cost of the louver jalousie windows as provided above with the monolithic Low E glass will not meet the proposed SHGC of .30 without adding on either extended roof overhangs, sunshades, solar/sun screens etc., that adds to the cost of using louver/jalousie windows.

Increase in energy usage to mechanically ventilate new and existing dwellings

Builders and homeowners will be economically coerced into using the less costly dual glazed window systems that will require some degree of mechanical ventilation (i.e. air conditioning, fans, or both). Sliding, single hung window styles *at best* provide only 50% of free airflow through the same sized window opening as that of a louver jalousie window system. No other window system can capture and channel the flow of the natural, cooling, trade winds through our island homes as effectively as the louver jalousie window. The reduction in natural ventilation will negatively affect the thermal comfort of the occupants. The end result will be an increase in the demand for mechanical ventilation and, conversely, an increase in the demand for energy and fossil fuel dependency.

The intent of the code is "to promote the effective use of energy in residential buildings

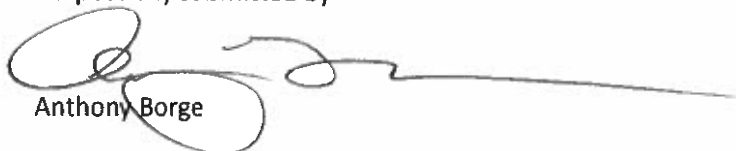
The proposed amendment does exactly the opposite by increasing the cost for efficient, natural ventilating, energy-saving louver jalousie windows over cheaper windows that will demand more energy. Is this effective use of energy?

Hawaii is geographically unique with 10 Climate Zones versus the rest of the forty-nine states and the world. We are comprised of island masses surrounded by the vast Pacific Ocean which provides us with a constant source of natural cool winds. The louver jalousie window provides an effective window system that facilitates and channels air exchange within the home with natural fresh cooling winds. The proposed code amendment will increase the cost and diminish sales of the most effective, energy-saving louver window system for Hawaii and falls short in achieving the desired intent.

For these reasons we ask that louver jalousie window systems be exempt from the proposed amendment. Let the homeowner decide which window system is best suited to deliver maximum, natural air flow that will their pocketbooks and deliver effect use of energy.

Thank you.

Respectfully submitted by



Anthony Borge

Speaker Registration/Testimony

Name Jonathan Boyne
 Phone 8089514934
 Email boyne@hawaii.edu
 Meeting Date 07-24-2019
 Council/PH Committee Zoning
 Agenda Item Bill 25 2019
 Your position on the matter Support
 Representing Self
 Organization
 Do you wish to speak at the hearing? No

Dear ZPH Chair Menor and Committee Members,

I support Bill 25. For the reasons below, I ask you to change all the bill's language about Level 1 charging to be Level 2 charging. I understand that Level 2 is fast becoming the standard nationwide, because it is several times faster, making EVs far more convenient and practical for homeowners and renters in a wide variety of situations. "Range anxiety" (fear one's battery won't last to the next charging station) should not prevent people from switching to an EV, which nearly everyone in Hawaii must eventually do.

Items 17, 28 and 31 in Bill 25--the solar water heating and EV-readiness parts--will do three important things:

Written
Testimony

1. Lower the cost of living for long-term Hawaii residents. Paying a permanent monthly bill for natural gas to heat water in sunny Hawaii is just silly. Solar water heating pays for itself in three or four years, and residents don't have a monthly gas bill. Ever. An electric water heater accounts for over 25% of the average electric bill. The sun is free.
Electric vehicles (EVs) will replace gas cars in the near future. Hawaii residents will need some way to charge at home. How will they afford to install the electrical equipment needed for that? Installing it is far less expensive during construction. Don't force new homeowners to spend thousands of dollars to retrofit their homes for the EV they will be driving within the next decade or two.
2. Help to fight our climate crisis. Those who want a choice of gas water heating should consider that the methane they would burn affects all of us. Their kokua is not just appreciated, it's essential.
Hawaii needs to adopt EVs widely and quickly if we hope to meet our clean energy goals. The top two reasons people don't buy an EV right now are range anxiety, and

too few charging stations in general [1]. Remove these barriers, and people will adopt. Cutting our greenhouse gas emissions depends on it.

3. Show some leadership! We're all very proud to be the first state to commit to 100% clean energy, but how will we get there? The Federal government is in love with coal. The Hawaii legislature did very close to nothing this year.

That leaves you. Are we all waiting for a giant hurricane to wipe out Waikiki? Are you waiting for Kam Highway to fall into the ocean completely? We know now that clean energy by 2045 is too little, too late, and it's past time to move the goal up. Way up.

You, and state lawmakers, are supposed to write laws to help protect us from sea level rise, catastrophic hurricanes, and rain bombs. This bill, and stronger amendments, deserve support from anyone with the least concern about climate change, or about saving consumers money.

Here's your chance to set an example. Take it!

Testimony

Attachment

Accept Terms
and Agreement 1

Speaker Registration/Testimony

Name Robert Nehmad
 Phone 8083669045
 Email rnehmad@hawaii.rr.com
 Meeting Date 07-25-2019
 Council/PH
 Committee Zoning
 Agenda Item Bill 25
 Your position
 on the matter Support
 Representing Self
 Organization
 Do you wish to
 speak at the
 hearing? No

This is a critical clean energy and climate measure that would modernize the City & County of Honolulu's building energy code. This modernization updates Honolulu's existing building energy code—which is over thirteen years out of date—to increase occupant health and comfort while significantly reducing energy use for new homes and buildings. The proposed code revision reflects broad changes in technology, building materials, and best practices, while considering Honolulu's unique island and building environment.

Written
 Testimony In addition, this measure would ensure that new homes come equipped with either solar or high-efficiency water heaters, helping to close the loophole that has allowed thousands of gas water heaters to be installed in recent housing.

Finally, Bill 25 helps Honolulu make the transition to zero emission vehicles by requiring that a certain percentage of new parking stalls be "EV-ready" (with wiring and capacity for EV chargers to be installed in the future). This will help to make electric vehicles more accessible to residents and reduce the overall cost of our transition to clean transportation. This provision should be strengthened, however, by requiring Level 2 charging capacity in all new parking stalls (for commercial and multi-family buildings), as Vancouver and other cities have done. This will help to "future-proof" new construction and accelerate our clean transportation future.

Testimony
 Attachment
 Accept Terms
 and Agreement 1

Honolulu City Council

Zoning, Planning and Housing Committee

Support for Bill 25, "Relating to the Adoption of the State Energy Conservation Code"

July 25, 2019, 9:00 AM hearing

Aloha Chair Menor, Vice Chair Waters, and members of the Committee,

I am testifying in strong support of Bill 25, "Relating to the Adoption of the State Energy Conservation Code."

The bill includes important considerations that will help allow residents and workers to live and work comfortably. I think we would be foolish to think we could have a comfortable future without Bill 25 and the efficiencies which will result. If we expect to afford a cool environment, hot water use, and private transportation then we need this bill.

I believe we must make it as easy as possible to use electric vehicles in order to reduce carbon dioxide emissions enough to meet the limits required by Hawaii Act 32 of 2017 (SB559 CD1). The requirements in this Honolulu bill to install the wiring during construction is a must to avoid extremely high cost of retrofitting after the initial construction.

Likewise, the requirements in this bill to ensure that water heating takes advantage of renewable energy is a must.

I should add that it seems like the bill should be amended so level 2 chargers (instead of just level 1) can easily be added so residence can fully charge their electric cars much faster.

Furthermore, the relatively inexpensive upfront investment during construction will minimize long-term energy costs for homeowners and renters alike, leading to lower overall costs to reduce greenhouse gas emissions.

As a member of the Citizens' Climate Lobby, I believe that Honolulu and the rest of the world cannot let climate change proceed unchecked. As such the United States needs to employ economic incentives to encourage households and businesses to reduce their emissions of greenhouse gases; I am especially hopeful the Energy Innovation and Carbon Dividend Act, which places a fee on emissions of carbon dioxide and refunds these fees to citizens, will become law. This act or similar laws will increase the cost of using fossil fuels. Therefore, to help Honolulu homeowners and renters avoid these higher energy costs, we need to provide carbon-free or low carbon options with the lowest cost possible. Bill 25 will do just that by significantly lowering the costs of switching to electric vehicles and solar hot water heating.

Please help make it relatively easy for homeowners and renters to adjust by passing bill 25. Measures in this bill are necessary for Honolulu to realize a sustainable future.

Thank you,
Charles E. Cox
Manoa

Speaker Registration/Testimony

Name Andrea Nandoskar
 Phone 808-923-2170
 Email birdofparadise@hawaii.rr.com
 Meeting Date 07-25-2019
 Council/PH Committee Zoning
 Agenda Item 7
 Your position on the matter Support
 Representing Self
 Organization
 Do you wish to speak at the hearing? No

I respectfully ask the Council to support Bill 25. We must take every measure possible to move toward a clean, green life-sustaining world, weaning ourselves off of fossil fuels and creating a green infrastructure. Measures that support this vision such as Bill 25 are key.

Written
 Testimony

Bill 25 will help Oahu residents protect the environment and respond to the climate crisis. It will enable Honolulu to set the bar for other counties on EV-ready and solar water heating provisions.

Mahalo for your consideration.

Testimony
 Attachment
 Accept Terms and Agreement 1

Speaker Registration/Testimony

Name Jim Nicolow
 Phone 8083793465
 Email jnicolow@sbcglobal.net
 Meeting Date 07-25-2019
 Council/PH Zoning
 Committee
 Agenda Item Bill 25
 Your position Support
 on the matter
 Representing Self
 Organization
 Do you wish to
 speak at the No
 hearing?

Aloha Chair Menor, Vice Chair Waters, and members of the Committee,

I am testifying in strong support of Bill 25, "Relating to the Adoption of the State Energy Conservation Code."

This is a critical clean energy and climate measure that would modernize the City & County of Honolulu's building energy code. This modernization updates Honolulu's existing building energy code—which is over thirteen years out of date—to increase occupant health and comfort while significantly reducing energy use for new homes and buildings. The proposed code revision reflects broad changes in technology, building materials, and best practices, while considering Honolulu's unique island and building environment.

Written In addition, this measure would ensure that new homes come equipped with either solar
 Testimony or high-efficiency water heaters, helping to close the loophole that has allowed
 thousands of gas water heaters to be installed in recent housing.

Finally, Bill 25 helps Honolulu make the transition to zero emission vehicles by requiring that a certain percentage of new parking stalls be "EV-ready" (with wiring and capacity for EV chargers to be installed in the future). This will help to make electric vehicles more accessible to residents and reduce the overall cost of our transition to clean transportation. This provision should be strengthened, however, by requiring Level 2 charging capacity in all new parking stalls (for commercial and multi-family buildings), as Vancouver and other cities have done. This will help to "future-proof" new construction and accelerate our clean transportation future.

Mahalo for considering my testimony in support of Bill 25.

Jim Nicolow, FAIA, LEED Fellow

USGBC-Hawaii Market Advisory Board Member

Testimony

Attachment

Accept Terms
and Agreement 1

Speaker Registration/Testimony

Name	Drake Wallace
Phone	12173690880
Email	drakewallace@gmail.com
Meeting Date	07-24-2019
Council/PH Committee	Zoning
Agenda Item	Bill 25
Your position on the matter	Support
Representing Organization	Self
Do you wish to speak at the hearing?	No
Written Testimony	I strongly support Bill 25. Oahu is very outdated in this area. The Bill will help climate control. Please pass Bill 25.
Testimony Attachment	
Accept Terms and Agreement	1

Speaker Registration/Testimony

Name NANETTE VINTON
 Phone 530-839-3039
 Email nanimac@gmail.com
 Meeting Date 07-25-2019
 Council/PH Committee Zoning
 Agenda Item Bill 25
 Your position on the matter Support
 Representing Self
 Organization
 Do you wish to speak at the hearing? No

Aloha,

I am writing in support of Bill 25 which requires EV ready infrastructure for new commercial and multi family buildings. This requirement will make charging more accessible for EV owners as often times, the lack of charging capability for condo/townhome owners affects the buying decision for an electric vehicle.

Written
Testimony

While requiring this EV charging infrastructure is a big step to promote EV growth, the limitations of Level 1 charging make it inefficient to service a large number of EVs as the charging rate is slow. A better alternative is to require Level 2 EV ready stalls as the charging rates are multiple times faster thus allowing for more EVs to use it.

Please advance Bill 25 with this EV-ready amendment.

Thank you for your consideration.

Regards,
 Nanette Vinton
 EV owner
 Mililani

Testimony
 Attachment
 Accept Terms
 and Agreement

1

Speaker Registration/Testimony

Name Jeremy Crabtree
 Phone 8083390534
 Email Crab110035@gmail.com
 Meeting Date 07-25-2019
 Council/PH Committee Zoning
 Agenda Item Bill 25 (2019)
 Your position on the matter Support
 Representing Self
 Organization
 Do you wish to speak at the hearing? No

Dear Chair Menor and Committee Members,

Written
Testimony

I whole heartedly support the passing of Bill 25 (2019) with local amendments. Oahu's out-of-date building codes need to be modernized in order to increase efficiency, decrease costs, and fight climate change. All of these positive changes can happen with the encouragement of solar powered water heating and readily available EV parking stalls. I hope that our voices are heard and our actions make a difference for a better future.

Mahalo Nui Loa,

Jeremy

Testimony
Attachment

Accept Terms
and Agreement 1

Speaker Registration/Testimony

Name Alex Naumov
 Phone 8084949300
 Email alexcommon@gmail.com
 Meeting Date 07-25-2019
 Council/PH Committee Zoning
 Agenda Item Agenda item 7, Bill 25
 Your position on the matter Support
 Representing Self
 Organization
 Do you wish to speak at the hearing? No

Written Testimony As an owner of an apartment in Waikiki, I am considering purchasing a new vehicle but do not have EV charging in my building. I understand Bill 25 will help ensure we are planning ahead for EV charging within multi-family buildings and commercial business sites, making it easier for homeowner with no current access, like me, and other residents to charge their vehicle in the community. It is essential to have leadership of the city in being proactive and anticipating growth of EV charging needs now, rather waiting for the need to retrofit in the future which will only further drive up costs.

Thank you for your time and attention to these issues, I urge you to support Bill 25.

Testimony Attachment
 Accept Terms and Agreement 1

Speaker Registration/Testimony

Name Patricia Donegan
 Phone 8082059944
 Email donegan@hawaii.edu
 Meeting Date 07-25-2019
 Council/PH Committee Zoning
 Agenda Item Bill 25, "Relating to the Adoption of the State Energy Conservation Code
 Your position on the matter Support
 Representing Self
 Organization
 Do you wish to speak at the hearing? No

Aloha Chair Menor, Vice Chair Waters, and members of the Committee,

I wish to support Bill 25, "Relating to the Adoption of the State Energy Conservation Code."

I was shocked to learn that a loophole has allowed thousands of gas water heaters to be installed in recently built housing. Bill 25 would ensure that new homes come equipped with either solar or high-efficiency water heaters.

We need to modernize our building energy code. Bill 25 updates Honolulu's existing code to reduce energy use for new homes and buildings. The proposed code revision reflects broad changes in technology, building materials, and best practices, while considering Honolulu's unique island and building environment.

Written Testimony

Further, Bill 25 helps us make the transition to zero emission vehicles by requiring that a certain percentage of new parking stalls be "EV-ready" (with wiring and capacity for EV chargers to be installed in the future). This will help to make electric vehicles more accessible to residents and reduce the overall cost of our transition to clean transportation. This provision should be strengthened, however, by requiring Level 2 charging capacity in all new parking stalls (for commercial and multi-family buildings), as other cities have done. This will help to "future-proof" new construction and accelerate our clean transportation future.

Mahalo for considering my testimony in support of Bill 25.
Patricia Donegan

Testimony
 Attachment
 Accept Terms
 and Agreement 1

Speaker Registration/Testimony

Name Rosemary Hedge
 Phone 562 303 6803
 Email Hedgebr@hotmail.com
 Meeting Date 07-25-2019
 Council/PH Committee Zoning
 Agenda Item Agenda Item 7
 Your position on the matter Support
 Representing Self
 Organization
 Do you wish to speak at the hearing? No

Written Testimony

I am an owner of an apartment in Waikiki and am intending to purchase a new electric vehicle but not do not have EV charging in my building.
 I understand Bill 25 will help ensure we are planning ahead for EV charging within multi family buildings and commercial building sites.
 This will make it easier for homeowners with no current on site access like me, and other residents to charge their vehicles at their place of abode or work.
 It is essential to have the leadership of the city to be proactive and anticipate growth of EV charging needs now, rather than waiting for the need to retrofit in the future which will only drive up costs further.
 Thank you for your time and attention to these issues. I urge you to support Bill 25.

Testimony
 Attachment

Accept Terms and Agreement 1

The Committee on Zoning, Planning, and Housing
Chair Ron Menor

Thursday, July 25, 2019 at 9:00 AM
Bill 25: Relating to the Adoption of the State Energy Conservation Code

TESTIMONY / SUPPORT
R. Elton Johnson, III

Dear Chair Menor and Committee members:

Thank you for the opportunity to testify in **strong support** of Bill 25. I'm encouraged to see this important measure affirming much of the 2015 International Energy Conservation Code as amended in the 2017 State Energy Conservation Code—which is critical to help us to realize Hawai'i's urgent environmental commitments.

Bill 25 will help us to sustainably power our **residences and businesses**. In order to install a solar water heater and solar photovoltaic system where we live in Kane'ohe, my wife and I had to take out a very challenging special loan. Ordinances such as those before you via Bill 25 accelerate the day when it will no longer be prohibitive for our residents to benefit from sustainable energy sources, driving adoption and thus helping the environment. It will become the norm, something included at the time of construction of our buildings, thanks to our forward-thinking lawmakers.

Bill 25 will also help our residents to adopt **electric vehicles**. Full adoption of electric vehicles will help Hawai'i achieve our goal of greater independence from imported fossil fuels—and thus greatly benefit both the environment and the State's GDP. But that's not going to happen until electric vehicles are a real, convenient alternative. Electric cars were more popular than either gas- or steam-powered motor cars over a century ago in 1900—but the requisite battery technology just wasn't yet there, so the less expensive fossil fuel-powered paradigm prevailed. Now we do have the battery technology—the question is whether our representatives in government have the vision and the will to lay the groundwork needed to establish the infrastructure that will finally make electric vehicles the norm—and stop harming our planet.

My wife and I have experienced the advantages of an electric car, but we've also experienced the challenges of finding locations to charge it, and charge it quickly enough that it is practical for us. That technology already exists. **Please consider amending Section C406.8 of the Code (Bill 25 section 17) in order to provide for the much faster Level 2 charging for residential buildings** (as is already provided in this bill for commercial buildings).

Bill 25 includes these and many other indispensable steps toward Hawai'i's vital clean energy commitments, actions that will benefit as well both the State economy and our personal finances.

Mahalo Nui for your favorable attention to Bill 25!

Support for Bill 25 (2019)

Good morning Chair Menor, Vice Chair Waters and ZPH Committee Members,

I strongly support the energy efficiency measures proposed in Bill 25(2019) including

- a) mandatory installation of electric vehicle infrastructure ("EV-Ready" stalls) in new residential, multi-unit buildings and in new commercial buildings
- b) mandatory solar water heaters (or an equivalent device using renewable energy) on all new residential single-family construction
- c) adoption of building codes applicable to the Tropical Zone which allows for lower construction costs for builders and lower energy costs for residents

I am in full agreement with Blue Planet Foundation's testimony and support for Bill 25 on July 3, 2019, particularly because of the jaw-dropping cost savings the state will realize by avoiding fossil fuel use and because the revised code allows for greater participation in that savings by Hawaii residents. According to Blue Planet, Oahu's savings over 20 years is approximately \$971 million under the proposed energy efficiency code revisions-- about \$318 million in residential energy savings and \$653 million in commercial energy savings.

If that cost savings doesn't motivate the Council to action, maybe this year's weather will. This year has heightened the urgency for climate action. We can feel the weather getting hotter, we can see our coastlines eroding. Other areas of the world have suffered through unimaginable flooding, storms and heat. Scientists have warned us again that mitigating actions are needed within 10 years (actually beginning within the next three years) to avoid the worst possible outcomes. Climate crisis is not on the horizon—it's here.

Many places around the world are taking bold actions to eliminate fossil fuels. A few examples:

- In Shenzhen, China, all 16,000 public buses were electric as of 2017. Now taxis are also going electric. China has over 1 million EVs on the road due largely to the government's massive investments in renewable energy. As a result, Chinese emissions (which are still high) are falling and air quality is improving.
- Another example: In Norway, electric vehicles made up 58% of all car sales in March of 2019. EV buyers in Norway receive government incentives. Thirty percent of cars in Norway are now EVs.
- Nearly every major American car maker has fully electric models as of 2019. The U.S. EV market was growing steadily at 20% each year, but in 2018 the growth was up a startling 81% from 2017.
- The city of Berkeley, CA, went bold by voting to ban natural gas lines in new low-rise residential buildings starting in January of 2020. The new homes will instead be required to have electric infrastructure.
- And Portland and Seattle (King County) have banned the creation of any new fossil fuel infrastructure.

Why did these bold actions occur? And what do they have in common? Many times it was concerned elected officials who understood the gravity of the climate crisis, and then created government policy that made positive change by individual citizens possible. And that's what I want to emphasize. Sometimes you folks in charge have to make tough decisions so that the rest of us can do the right things (in this case, reduce fossil fuel use to help save the planet).

Hawaii has bold goals, too, but...we have been slow to come out of the blocks...

- By State law Hawaii must be fossil fuel free by 2045 or before—a bold goal; yet, until a recent court ruling, excessive exceptions to the solar water heater code allowed developers and individuals to install fossil fuel-powered devices. That was not the intent of the law (HRS 196-6.5). City Bill 25 ensures that any exceptions must also use some form of renewable energy. Because of this, homeowners can now expect lower electric bills over the life of their solar water heater system—and we all get the benefit of less fossil fuel use.
- Mayor Caldwell, in his State of the City message, expects that our City transportation fleet will be 100% renewable by 2035 (another bold goal), and that thousands of personal EVs will eventually be on our roads; however, we have yet to provide the essential charging infrastructure in Honolulu to allow these transportation transformations to occur (surveys show that 80% of EV owners prefer charging either at home or at work; hence the reason for Bill 25 which will finally allow renters in multi-family dwellings and workers in new commercial buildings to make a climate-friendly choice and go forward with electric car purchases.

Right now we need bold action on the legislative front. The bill has been written. The people, including the mayor, the Climate Office, the State Energy Office and regular citizens are asking for climate action. All it takes is the go-ahead from you folks. The time to take this action is NOW—when it matters. So...Go Bold: Support Bill 25.

Thank you for listening,
Janet L. Pappas and Ronald H. Yasuda
Aiea, Hawaii 96701

Please make one change to the proposed code in Bill 25, (17) Subsection 406.8:

- Remove the Level 1 charger code from the EV-Ready infrastructure subsection. Due to the greater charging capacity of most EVs purchased nowadays (100-150 miles per charge), a Level 2 charger is the only charger that makes sense for most cars.

Other statements supporting Bill 25 and the road to clean energy:

- Bill 25 is actually a very small but necessary step along the path to 100% renewable energy. Let's not stumble on our first step out the door. Let's get the groundwork for clean energy in place NOW.
- We need everyone's help and participation to tackle the climate crisis. When people are empowered, they become more resilient and better able to handle change. The healthier, the better informed, the more resilient people are, the more they can help move the world forward.
- Climate change is the world's biggest challenge, but also our biggest opportunity to make the world better. We can decide to accept the challenges and reap the benefits or stay with the status quo and possibly lose life as we know it on this planet.

Reminder of State Climate objectives:

- "Sequester more atmospheric carbon and greenhouse gases than emitted within the State as quickly as practicable, but no later than 2045"...
- "Increased energy security and self-sufficiency through the reduction and ultimate elimination of Hawaii's dependence on imported fuels for electrical generation and ground transportation."
- Hawaii's Constitution states: "For the benefit of present and future generations, the State and its political subdivisions shall conserve and protect Hawaii's natural beauty and all natural resources, including...energy sources, and shall promote the development and utilization of these resources in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State."

Reminder of Honolulu climate commitments:

- Honolulu received over \$2 million and technical assistance to meet its Paris agreement goals, some of which are: reduce number of polluting vehicles on streets; deliver climate action that is inclusive and benefits all citizens; improve our "C" rating on the Carbon Disclosure Project; have a carbon-free rail corridor.

Dollars and sense:

- An article in Forbes (7/22/2019) states that renewable energy could save *160 trillion dollars* in climate change costs by 2050.
- Hitting the toughest climate target will save the world \$30 trillion in damages, analysis shows. Almost all nations would benefit economically from keeping global warming to 1.5C, a new study indicates.
- A study in April 2018 by Elemental Excelsior notes that for Hawaii, transitioning to renewable energy is cheaper than sticking with oil. The faster we get off, the cheaper it will be.
- A report by the National Institute of Building Sciences: for every \$1 invested in updating building codes, it yields an \$11 benefit.

Support for electric vehicles (EVs):

- EVs are the fastest-growing segment of new cars in Hawaii. Over the past year (May 2018 – May 2019), EV registrations on Oahu increased by over 30%, while registrations of gas-powered vehicles grew only 0.1 percent. Ten thousand EVs are expected to be registered in Hawaii by the end of 2019, with numbers growing exponentially as newer models come out with longer ranges and lower prices.
- An EV-Ready requirement will ensure that the EV charging infrastructure necessary to support the influx of electric vehicles can be installed more efficiently and cost-effectively in new construction projects. It will provide new EV owners—particularly those that will live in new multi-family residential buildings—with the assurance that they will be able to access charging at home, at the workplace, and in public spaces.
- There is a possibility that EVs can serve as storage devices at night if their batteries are plugged into the grid. This use of off-peak energy storage helps to balance the grid.

Other big goals:

- Planting 1,000,000 trees on Oahu
- A coal-free Oahu by 2022? This goal has been compared to the moon landing challenge; that is, it's a VERY bold goal. Apparently, though, Hawaiian Electric is focusing on greatly increased energy storage capacity to achieve this goal.

Compare the goals of other cities:

- Vancouver, WA, banned future oil terminals and Oakland, CA, approved a ban on coal infrastructure.
- In 2016, Canada announced a phase-out of coal-fired power by 2030.

- Our personal experience with EVs and charging:

As the owners of a Nissan Leaf EV since 2011, my husband and I have driven over 67,000 miles these past 8 years without stopping at a gas station. We own a home where we have installed solar panels on the roof and an EV charger in the garage (We definitely recommend a home charger if possible. It's as easy as plugging in your phone.) We feel fortunate to be using a fossil fuel free transportation solution and contributing to Hawaii's 100% renewable energy goal. As EV car prices drop, we hope many others will take advantage of cars that are low maintenance (no gas, no oil, no water, no transmission fluid), have quick pick-up, and are fun to drive. Battery degradation has been handled by warranty. When the battery began to degrade at about four years, we were able to swap it out for a new, improved battery at no charge. Other than that, the only maintenance in eight years has been tire rotation and replacement and windshield wiper replacement. That's it. We love our Leaf!

Speaker Registration/Testimony

Name Amanda S Armstrong
 Phone 808-951-5540
 Email alohaamanda@hawaii.rr.com
 Meeting Date 07-25-2019
 Council/PH Zoning
 Committee
 Agenda Item Bill 25
 Your position Support
 on the matter
 Representing Self
 Organization
 Do you wish to
 speak at the No
 hearing?

Honolulu City Council
 Zoning, Planning and Housing Committee
 Support for Bill 25, "Relating to the Adoption of the State Energy Conservation Code"
 July 25, 2019, 9:00 AM hearing

Aloha Chair Menor, Vice Chair Waters, and members of the Committee,

I am testifying in strong support of Bill 25, "Relating to the Adoption of the State Energy Conservation Code."

Written
 Testimony

This is a critical clean energy and climate measure that would modernize the City & County of Honolulu's building energy code. This modernization updates Honolulu's existing building energy code—which is over thirteen years out of date—to increase occupant health and comfort while significantly reducing energy use for new homes and buildings. The proposed code revision reflects broad changes in technology, building materials, and best practices, while considering Honolulu's unique island and building environment.

In addition, this measure would ensure that new homes come equipped with either solar or high-efficiency water heaters, helping to close the loophole that has allowed thousands of gas water heaters to be installed in recent housing.

Finally, Bill 25 helps Honolulu make the transition to zero emission vehicles by requiring that a certain percentage of new parking stalls be "EV-ready" (with wiring and capacity for EV chargers to be installed in the future). This will help to make electric vehicles more accessible to residents and reduce the overall cost of our transition to clean transportation. This provision should be strengthened, however, by requiring Level 2 charging capacity in all new parking stalls (for commercial and multi-family buildings), as Vancouver and other cities have done. This will help to "future-

proof” new construction and accelerate our clean transportation future.

Mahalo for considering my testimony in support of Bill 25.

Amanda S Armstrong, PhD

Testimony
Attachment
Accept Terms
and Agreement ¹

Speaker Registration/Testimony

Name Paul Bernstein
 Phone 8083737161
 Email PAULBERNSTEIN2004@YAHOO.COM
 Meeting Date 07-25-2019
 Council/PH Committee Zoning
 Agenda Item Item 7 Bill 25
 Your position on the matter Support
 Representing Self
 Organization
 Do you wish to speak at the hearing? No

Aloha Council Members:

I am writing in support of Bill 25. Economists have long recognized the principal-agent problem that constrains incentives for energy-efficiency investments by either landlords or tenants in renter-occupied properties and the need for energy efficiency standards to overcome this market failure. That is, there are instances that regulators should invoke energy efficiency standards to effect a more efficient market outcome that improves the well being of society.

Bill 25 is one such case. The Bill's requirement for the installation of solar hot water (SHW) heaters would result in savings of up to \$8,600 per household over the expected life of the equipment compared to a standard grid resistance water heater.

Written
Testimony

As for the Bill's requirement to make 25% of stalls in newly constructed multi-family facilities over 8 stalls and commercial parking facilities over 12 stalls "EV ready," this requirement will save Oahu renters greatly as it is far less expensive to incorporate EV readiness into a building as it is being constructed rather than retrofitting a building. This provision will also greatly reduce the cost of Hawaii meeting its clean energy goals.

Mahalo for the opportunity to submit comments in support Bill 25 (2019). I urge you to support the Bill as proposed by the Administration.

Kind regards,
Paul Bernstein, PhD

Testimony
Attachment

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and Agreement 1

Speaker Registration/Testimony

Name Haleigh Gorman
 Phone 2675661025
 Email Hgorman96@gmail.com
 Meeting Date 07-24-2019
 Council/PH
 Committee Zoning
 Agenda Item Bill 25 (2019)
 Your position on
 the matter Support
 Representing Self
 Organization
 Do you wish to
 speak at the
 hearing? No

Dear chair menor and committee members,

Written I strongly support the passage of Bill 25 (2019) with local amendments. This is a
 Testimony critical measure that would finally modernize Oahu's out-of-date building code to
 increase efficiency, decrease costs, and help fight climate change with local
 amendments to encourage solar water heating and make parking stalls EV ready

Thank you

Haleigh Gorman

Testimony
 Attachment

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 and Agreement 1

Speaker Registration/Testimony

Name Nicholas Skully
 Phone 3306968859
 Email nickskully@gmail.com
 Meeting Date 07-24-2019
 Council/PH Committee Zoning
 Agenda Item Bill 25 (2019)
 Your position on the matter Support
 Representing Self
 Organization
 Do you wish to speak at the hearing? No

Dear committee,

Written Testimony I strongly support bill 25 (2019) and all other actions that help combat climate change and Oahus out of date building code.

Thank you,
Nick

Testimony Attachment

Accept Terms and Agreement 1

Speaker Registration/Testimony

Name	Gina Saneishi
Phone	8084794557
Email	Gsaneishi@gmail.com
Meeting Date	07-25-2019
Council/PH Committee	Zoning
Agenda Item	Bill 25
Your position on the matter	Oppose
Representing	Self
Organization	
Do you wish to speak at the hearing?	No
Written Testimony	
Testimony Attachment	
Accept Terms and Agreement	1



Imanaka Asato
A LIMITED LIABILITY LAW COMPANY

July 24, 2019

The Honorable Ron Menor, Chair
The Honorable Tommy Waters, Vice Chair
Members of the Committee on Zoning
Planning and Housing
City Council, City and County of Honolulu
Honolulu, Hawaii 96813-3077

RE: Bill 25 (2019) – RELATING TO THE ENERGY CODE

Aloha Chair Menor and Members of the Committee on Zoning, Planning and Housing,

Mahalo for the opportunity to submit testimony on behalf of D.R. Horton in **OPPOSITION** to Bill 25. D.R. Horton is one of Hawaii's largest home builders, and has been working on projects throughout Honolulu for decades. D.R. Horton has been a leader in energy efficient and sustainable homes in Hawaii and supports the City's efforts to promote sustainability. In fact, D.R. Horton has committed to an overall sustainability plan for its Ho'opili project. Under the Ho'opili plan, D.R. Horton has included numerous sustainable features in the homes including:

- Urban and edible gardens/trees in every single family home,
- Edible fruit trees in common area parks and green spaces,
- Participation in Hawaiian Electric Company's Grid Interactive Water Heater program
- Photovoltaic infrastructure (PV Ready),
- Electric vehicle charging infrastructure (EV Ready),
- Dual glazed windows,
- LED lighting,
- Tankless instant gas water heaters with a suite of energy saving gas appliances,
- Water conserving plumbing fixtures,
- 20 SEER+ high efficiency air conditioners

- Ceiling fan options,
- Solatube options,
- Solar attic fan options ,
- Participation in the City's refuse recycling program and
- Participation in the City's R1 recycled water system infrastructure

Despite D.R. Horton's commitment to sustainability, we are concerned with the approach Bill 25 takes with the amendments to the State Energy Code. Hawaii is already one of the most expensive states in the nation to build homes. In addition to the high cost of land and materials, entitlements and other development fees, mandates add substantial costs to the price of a home. On the other hand, Hawaii is in dire need of affordable housing. The increased cost of development, and in turn, the cost of homes, places homeownership out of reach for an increasingly high percentage of local residents. Bill 25 would add yet another increase to the cost of building homes with little current demand for EV charger stalls.

Specifically, the requirements that new residential multi-unit buildings with more than eight parking stalls be electric vehicle (EV) charger ready for at least 25% of the stalls and that solar water heaters be used for 90% of unit's water heating service needs would add substantial costs to the price of a home. Based on recent estimates, the EV charger infrastructure would add approximately \$1,700 to each unit if spread across all units or \$7,000 per unit if limited to those units with the EV infrastructure parking stall assigned – not including the EV charger itself nor the additional cost to upgrade system transformers as required. Similarly, the solar water heater system would add about \$7500 per unit for systems that historically have been shown to have a usable life of as little as 5 years without annual maintenance. These are substantial costs to the price of a home without any promise of increasing EV use or having greater renewable energy benefits than what D.R. Horton has already committed to.

There are also administrative concerns with the EV infrastructure mandate. For example, assigned parking stalls for multi-family units are not easily reassigned. As a condominium project, D.R. Horton assigns a fixed number of parking stalls as limited common elements appurtenant to the project via an exhibit to the recorded CPR declaration. Once assigned and recorded, it is very difficult to reassign the parking stalls. For multi-family units with a paved parking lot, proximity to the unit is much more important than EV infrastructure. If only certain units are assigned an uncovered EV ready stall, than the buyer and any subsequent buyer is unable to request a different stall for more likely demand factors such as proximity to the unit. Accordingly, the parking stall assignment may drive the sales, or lead to reduced demand, of the units and will likely lead to limited resale opportunities for the buyer. It could also increase

The Honorable Ron Menor, Chair
The Honorable Tommy Waters, Vice Chair
July 24, 2019
Page 3

administrative and legal costs as recorded CPR documents may need to be amended to accommodate the impracticality of pre-assigned EV ready parking stalls.

D.R. Horton believes some additional research and/or incentives should be included with the EV infrastructure and solar water heater mandates in Bill 25. We would appreciate the opportunity to work with the council and other stakeholders to determine some viable options.

In summary, affordable housing is severely needed throughout Honolulu and additional mandates or fees drive these costs out of the reach of local residents. The City should review in totality the numerous proposed policies and code amendments that each increase cost to the price of housing and that combined, aggregate into an obstacle to build more affordable housing. We strongly urge you to defer this bill until reasonable amendments can be made.

Mahalo for your consideration,



Michael L. Iosua

Speaker Registration/Testimony

Name Joseph Kohn MD
 Phone 8083596605
 Email joseph@weareone.cc
 Meeting Date 07-25-2019
 Council/PH Committee Zoning
 Agenda Item Bill 25
 Your position on the matter Support
 Representing Organization
 Organization We Are One, Inc.
 Do you wish to speak at the hearing? No

In strong support of Bill 25

Dear ZPH Chair Menor and Committee Members,

I support Bill 25. For the reasons below, I ask you to change all the bill's language about Level 1 charging to be Level 2 charging. I understand that Level 2 is fast becoming the standard nationwide, because it is several times faster, making EVs far more convenient and practical for homeowners and renters in a wide variety of situations. "Range anxiety" (fear one's battery won't last to the next charging station) should not prevent people from switching to an EV, which nearly everyone in Hawaii must eventually do.

Written Testimony Items 17, 28 and 31 in Bill 25--the solar water heating and EV-readiness parts--will do three important things:

1. Lower the cost of living for long-term Hawaii residents. Paying a permanent monthly bill for natural gas to heat water in sunny Hawaii is just silly. Solar water heating pays for itself in three or four years, and residents don't have a monthly gas bill. Ever. An electric water heater accounts for over 25% of the average electric bill. The sun is free.

Electric vehicles (EVs) will replace gas cars in the near future. Hawaii residents will need some way to charge at home. How will they afford to install the electrical equipment needed for that? Installing it is far less expensive during construction. Don't force new homeowners to spend thousands of dollars to retrofit their homes for the EV they will be driving within the next decade or two.

2. Help to fight our climate crisis. Those who want a choice of gas water heating should consider that the methane they would burn affects all of us. Their kokua is not just

appreciated, it's essential.

Hawaii needs to adopt EVs widely and quickly if we hope to meet our clean energy goals. The top two reasons people don't buy an EV right now are range anxiety, and too few charging stations in general [1]. Remove these barriers, and people will adopt. Cutting our greenhouse gas emissions depends on it.

3. Show some leadership! We're all very proud to be the first state to commit to 100% clean energy, but how will we get there? The Federal government is in love with coal. The Hawaii legislature did very close to nothing this year.

That leaves you. Are we all waiting for a giant hurricane to wipe out Waikiki? Are you waiting for Kam Highway to fall into the ocean completely? We know now that clean energy by 2045 is too little, too late, and it's past time to move the goal up. Way up. You, and state lawmakers, are supposed to write laws to help protect us from sea level rise, catastrophic hurricanes, and rain bombs. This bill, and stronger amendments, deserve support from anyone with the least concern about climate change, or about saving consumers money.

Here's your chance to set an example. Take it!

[1] <https://www.media.volvocars.com/us/en-us/media/pressreleases/248305/poll-finds-americans-feel-electric-vehicles-are-the-future-of-driving>

Thank you for the opportunity to testify.
www.WeAreOne.cc

Testimony
Attachment

Accept Terms
and Agreement 1



"Advancing the Commercial Property Management Industry through Education, Networking and Advocacy"

Testimony to the
Honolulu City Council
Committee on Zoning, Planning & Housing

9:00 a.m., July 25, 2019

RE: Bill 25 Relating to City Energy Conservation Code

Aloha Chair Menor, Vice Chair Waters, and members of the Committee:

We are testifying on behalf of the Building Owners and Managers Association of Hawaii, a trade organization focused on actively and responsibly representing the commercial real estate industry through the collection, analysis and communication of information and through professional development. BOMA Hawaii is a leader in promoting energy efficient buildings and strongly supports energy efficient alternatives transportation.

It has been estimated that more than 500,000 electric vehicles are now on the road in the United States, and this is only expected to grow. As plug-in cars have become more visible on the nation's highways and local streets, there has also been a corresponding need for electric vehicle charging stations. This emerging need is creating a marketplace demand. Many building owners have installed EV charging stations and have successfully used them as a profit center as well as an amenity to attract new business and/or new tenants. Others are reluctant to take on the cost (installation cost, lost revenue from lost parking spaces, etc.), ongoing maintenance and management responsibilities, and liability. Where building owners can balance the benefits and potential draw backs, and where it makes economic sense, we believe that property owners will move forward to meet the need, without federal, state or local mandates.

We respectfully oppose the proposed 25% EV charging station-readiness mandate unless the measure is amended to include incentives to promote adoption and implementation.

We want to contribute positively to the discussion about promoting and incentivizing the construction of parking stations ready to be equipped with electric vehicle charging stations. We look forward to serving as a resource to the Council's subject matter committees on this bill and appreciate the opportunity to testify.



MASON CONTRACTORS ASSOCIATION OF HAWAII
2312 Kanealii Avenue • Honolulu, Hawaii 96813

July 23, 2019

**HONOLULU CITY COUNCIL
COMMITTEE ON ZONING, PLANNING AND HOUSING**

**Committee Meeting Room
Honolulu, Hawaii 96813
DATE: Thursday, July 25, 2019
TIME: 9:00 a.m.**

TESTIMONY ON BILL NO. 25 (2019) – Relating to the Adoption of the State Energy Code

To Council Chair Emeritus Menor, Vice Chair Waters and members of the Committee:

The Mason Contractors Association of Hawaii represents the mason contractors in the State of Hawaii.

Thank you for the opportunity to testify in SUPPORT of **Bill No. 25**, relating to the adoption of the State Energy Code. The MCAH supports the intent of Bill No. 25 and request amendments as provided on page 2 in our testimony, to include concrete masonry and concrete walls in the building code to improve from the standpoint of energy efficiency and fire/life safety. The MCAH would like to ensure that the sustainability and safety benefits of mass wall construction are recognized in the revisions to the State Building Codes, because these revisions help to create codes that are specific to Hawaii's unique climate resulting in greater energy efficiency and cost savings.

Thank you for the opportunity to testify.

Respectfully,


Mason Contractors Association of Hawaii

President, Ryan Wada



MASON CONTRACTORS ASSOCIATION OF HAWAII
2312 Kanealii Avenue • Honolulu, Hawaii 96813

C402.2.3 Thermal resistance of above-grade walls. The minimum R-value of materials installed in the wall cavity between framing members and continuously on the wall shall be as specified in Table C402.1.3, based on framing type and construction materials used in the wall assembly.

wood framed, metal framed, and mass walls

Exception: Continuous insulation for ~~wood and metal framed walls~~ are not required when one of the following conditions are met:

1. Walls have a covering with a reflectance of equal to or greater than 0.64 and/or overhangs with a projection factor equal to or greater than 0.3;
2. Walls have overhangs with a projection factor equal to or greater than 0.3. The projection factor is the horizontal distance from the surface of the wall to the farthest most point of the overhang divided by the vertical distance from the first floor level to the bottom-most point of the overhang; or
3. Concrete, concrete masonry units (CMU), and similar mass walls are six inches or greater in thickness.

The R-value of integral insulation installed in CMUs shall not be used in determining compliance with Table C402.1.3. Mass walls shall include walls:

1. Weighing not less than 35 psf (170 kg/m²) of wall surface area.
2. Weighing not less than 25 psf (120 kg/m²) of wall surface area where the material weight is not more than 120 psf (1900 kg/m³).
3. Having a heat capacity exceeding 7 Btu/ft²°F (144 ^{kJ}/m² • K).
4. Having a heat capacity exceeding 5 Btu/ft²°F (103 kJ/m² • K), where the material weight is not more than 120 pcf (1900 kg/m³).

Exception: ~~Concrete, CMU, and similar mass walls are six inches or greater in thickness.~~



COMMERCIAL REAL ESTATE
DEVELOPMENT ASSOCIATION

HAWAII CHAPTER

July 19, 2019

The Honorable Ron Menor, Chair
The Honorable Tommy Waters, Vice Chair
Members of the Committee on Zoning
Planning and Housing
City Council, City and County of Honolulu
Honolulu, Hawaii 96813-3077

RE: Bill 25 (2019) – RELATING TO THE ENERGY CODE

Aloha Chair Menor and Members of the Committee on Zoning, Planning and Housing,

Mahalo for the opportunity to submit testimony on behalf of NAIOP Hawaii in OPPOSITION to Bill 25. NAIOP Hawaii is the local chapter of the nation's leading organization for office, industrial, retail, residential and mixed-use real estate. NAIOP Hawaii has over 200 members in the State including local developers, owners, investors, asset managers, lenders and other professionals. NAIOP Hawaii is generally supportive of the City & County's efforts to promote sustainability. We are, however, concerned with the tremendous burden an additional mandate places on the cost of building homes in Hawaii, especially affordable housing.

Bill 25 seeks to adopt the Energy Code with certain amendments. Among those amendments a mandate that up to 25% of parking stalls be "electric vehicle charger ready." Hawaii's residents and businesses are already among the most heavily taxed in the entire country. The real estate development and construction industries are two of the biggest drivers of the entire State economy. These additional costs may seem minor, however, there are already significant development mandates which increase the cost of building residential units, which has significantly exacerbated the lack of affordable housing in Hawaii.

In addition, the bill places tremendous administrative burdens on developers and associations. The electric vehicle charger mandate may be feasible for developments with a parking structure, but for paved parking next in a multi-family development, where parking stalls are assigned by proximity rather than demand for infrastructure, sale of units may be driven by the parking stalls rather than the units themselves. In addition, once the parking stall is assigned, it is almost impossible to reassign parking stalls to different units.

Ron Menor, Chair
Members of the Committee on Zoning,
Planning and Housing
July 3, 2019
Page 2

A better alternative to the mandate would be to incentivize installation of electric vehicle infrastructure or find alternative venues such as at the work place. Where building owners and developers see a demand or other benefit that outweighs the cost, or makes economic sense, the owners will move forward to meet the need imposing unwarranted costs.

In order to keep the cost of housing from spiraling out of control, the City should resist the urge to place additional costs such as the 25% mandate for electric vehicle infrastructure. For these reasons, we urge you to amend Bill 25 to eliminate or reduce the mandate.

Mahalo for your consideration,

Scott W. Settle
NAIOP Hawaii



HAWAII TEAMSTERS AND ALLIED WORKERS, LOCAL 996

Affiliated with the International Brotherhood of Teamsters

1817 Hart Street
Honolulu, Hawaii 96819-3205

Telephone: (808) 847-6633
Fax: (808) 842-4575

Meeting Date: **July 25, 2019**
Agenda Item: **Bill 25 (2019)**
Position: **OPPOSE**

Chair Emeritus Menor, Vice Chair Waters and members of the Committee,

Hawaii Teamsters and Allied Workers Local 996 stand **OPPOSED** to Bill 25, relating to the adoption of the state energy conservation code, in its current form.

We object to the provisions of Bill 25, that require homes to be built with solar water heaters, taking away homeowners' options to use more economical gas water heaters.

This blanket ordinance impacts the construction for 25,000 residents who need affordable housing. Proponents will say that the costs for solar can be borne by the homeowner. The unfortunate truth is the people most hurt by this ordinance will be low- and moderate-income residents attempting to purchase a home. The cost difference between a solar water heater and an instantaneous gas water heater can be \$7,000. For a family of 4 making the area median income of \$85,000 that cost alone could be the difference between qualifying for a mortgage or not.

Our members and other consumers deserve a clear choice on how their homes are heated, when it comes savings, and resiliency. Please take into consideration emergency preparedness, in the wake of natural disasters. The Hawaii Emergency Management Agency estimates the loss of power during a civil emergency could last 14 days or more. Gas-powered water heaters and stoves would be the only available source of heating until power is restored. Gas lines are underground and are less susceptible to inclement weather.

One example of the benefit of gas utility customers is in Kaua'i. Residents in Hanalei, Wainiha, and Haena faced some of the worst flooding in history when 50 inches of rain fell in a 24 hour period in 2018. HG customers with gas powered water heaters, and stoves still had access to hot water and able to cook in their homes without power.

We need to diversify our energy supply and eliminating gas as an energy source is counterproductive. It also puts our economy in jeopardy and risks the livelihood hood of good Teamster jobs for 225 employees on Oahu.

The citizens, our members, and your constituents deserve the option and look forward to your leadership in weighing these factors.

Mahalo for the opportunity to testify

Cody Sula
Government Affairs Liaison
Hawaii Teamsters and Allied Workers, Local 996



July 24, 2019

To: Honolulu City Council
Zoning, Planning and Housing Committee

Re: Support for Bill 25, "Relating to the Adoption of the State Energy Conservation Code"

Hrg: July 25, 2019, 9:00 AM hearing

Aloha Chair Menor, Vice Chair Waters, and members of the Committee,

The Hawaii Public Health Association is a group of over 600 community members, public health professionals and organizations statewide dedicated to improving public health. HPHA also serves as a voice for public health professionals and as a repository for information about public health in the Pacific.

I am testifying on behalf of the Hawaii Public Health Association in strong support of Bill 25, "Relating to the Adoption of the State Energy Conservation Code."

The health impacts of climate change are already being felt and will continue to grow. Hawaii Public Health Association supports this critical clean energy and climate measure that would modernize the City & County of Honolulu's building energy code. This modernization updates Honolulu's existing building energy code—which is over thirteen years out of date—to increase occupant health and comfort while significantly reducing energy use for new homes and buildings. The proposed code revision reflects broad changes in technology, building materials, and best practices, while considering Honolulu's unique island and building environment.

In addition, this measure would ensure that new homes come equipped with either solar or high-efficiency water heaters, helping to close the loophole that has allowed thousands of gas water heaters to be installed in recent housing.

Finally, Bill 25 helps Honolulu make the transition to zero emission vehicles by requiring that a certain percentage of new parking stalls be "EV-ready" (with wiring and capacity for EV chargers to be installed in the future). This will help to make electric vehicles more accessible to residents and reduce the overall cost of our transition to clean transportation. This provision should be strengthened, however, by requiring Level 2 charging capacity in all new parking stalls (for commercial and multi-family buildings), as Vancouver and other cities have done. This will help to "future-proof" new construction and accelerate our clean transportation future.

Mahalo for considering Hawaii Public Health Association's testimony in support of Bill 25.

Respectfully submitted,

A handwritten signature in blue ink that reads "Tenaya Jackman".

Tenaya Jackman, Officer
Hawaii Public Health Association



LIUNA!

**TESTIMONY OF RYAN K. KOBAYASHI
GOVERNMENT AND COMMUNITY RELATIONS DIRECTOR
HAWAII LABORERS UNION (LIUNA) LOCAL 368**

PETER A. GANABAN
*Business Manager/
Secretary-Treasurer*

ALFONSO OLIVER
President

JOBY NORTH II
Vice President

TONI FIGUEROA
Recording Secretary

JAMES DRUMGOLD JR.
Executive Board

ORLANDO PAESTE
Executive Board

JOSEPH YAW
Executive Board

MARTIN ARANAYDO
Auditor

RUSSELL NAPIHA'A
Auditor

MARK TRAVALINO
Auditor

ALFRED HUFANA JR.
Sergeant-At-Arms

Hearing: Zoning and Housing Committee
Date: July 25, 2019
Place: Council Meeting Room
Time: 10:00 a.m.

**RE: BILL 25 (2019) RELATING TO THE ADOPTION OF THE STATE ENERGY
CONSERVATION CODE**

Aloha Chair Menor Vice Chair Waters, and councilmembers,

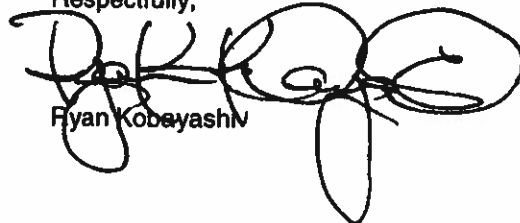
My name is Ryan K. Kobayashi, Government and Community Relations Director for the Hawaii Laborers Union Local 368. The Hawaii Laborers Union (LIUNA), Local 368 is made up of over 5000 working and retired members across the State of Hawaii and we would like to take this opportunity to offer comments regarding Bill 25 Relating to the Adoption of the State Energy Conservation Code.

Before we get into any commentary we would like to take this opportunity to express our support for an addition to the State Energy Conservation Code, and that is our support for the addition of masonry and concrete walls which we feel would improve the code in the areas of energy efficiency and fire safety in Hawaii.

As far as commentary regarding the rest of the code we are concerned that some of the recommendations made in the code could potentially conflict with County policies especially in the area of providing truly "affordable housing" for the resident of Honolulu. There are several areas in the code especially, in the areas of EV charging stations and the requirement for solar water heating that could potentially drive up the cost of building in Honolulu, working against the policy of providing truly "affordable housing."

Additionally, we feel that the reach of this bill is overbroad as well and alternative ways of implementing such a code should be explored. Things like making the Energy Code an "optional" code to follow, exempting affordable housing projects from the code, or offering "incentives" that would flow down to purchasers or renters to name a few, should all be explored before implementing this code.

Respectfully,



Ryan Kobayashi

LIUNA Local 368
1617 Palama Street
Honolulu, HI 96817
Phone: (808) 841-5877
Fax: (808) 847-7829
www.local368.org

Feel the Power

**Testimony before the Committee on Zoning, Planning and Housing
City and County of Honolulu**

Written Testimony in Support

**Bill 25 (2019), Proposed CD1
Relating to the Adoption of the State Energy Conservation Code**

**By Michael Colón
Manager, Electrification of Transportation Department
Hawaiian Electric Company, Inc.
and
Carlos Perez Loriga
Director, Customer Solutions
Hawaiian Electric Company, Inc.**

**July 25, 2019
9:00 a.m.
City Council Committee Room**

Chair Menor, Vice Chair Waters, and Members of the Committee,

Hawaiian Electric Company, Inc. ("Hawaiian Electric") is writing in support of Bill 25 (2019), Proposed CD1 which is proposing to adopt the State Energy Conservation Code with county amendments to regulate the design and construction of residential and commercial buildings. Hawaiian Electric Company is writing in support of Bill 25 (2019), Proposed CD1, : (1) Subsection R403.5.5 which would allow certain exceptions to the requirement that residential single-family buildings use solar, wind or another renewable energy source for not less than 90 percent of the energy for service water heating; and (2) Subsection C406.8 relating to Electric vehicle infrastructure, which seeks to integrate clean transportation planning with large residential and commercial development, by requiring a portion of available parking stalls be electric vehicle (EV) charger ready. These two provisions are working toward a cleaner renewable future for Honolulu and the State of Hawaii.



In Subsection R403.5.5 Solar Water Heating -- this bill is proposing to provide an exception if the installation of a solar water heater proves to be impractical due to poor solar resource or is cost-prohibitive based upon a life cycle cost-benefit analysis. Furthermore, the exception allows for the use of other technologies that advance renewable energy for service water heaters; in particular, the exception offers the option to use grid-interactive water heaters fitted with controls that would also enable customers to participate in Hawaiian Electric Company's demand response programs while helping the State achieve its renewable goals. As water heaters are one of the highest energy consuming appliances, the ability to control such load through Demand Response will create an opportunity for customers to directly participate in the reliability of our grid while enabling greater renewable energy integration in the State. For these reasons, Hawaiian Electric supports the proposed language in Subsection R403.5.5.

In addition, Hawaiian Electric Company supports Subsection C406.8 Electric vehicle infrastructure -- this subsection proposes Electric Vehicle infrastructure for new residential multi-unit buildings and new commercial buildings meeting certain criteria, commonly known as EV charger readiness. This bill has the potential to make a big impact on the availability of EV charging infrastructure, particularly in areas of high population density. These areas are typically ideal locations for EVs in that residents typically have shorter driving distances than those living in less dense, but more distant locations from the city center. Existing commercial locations and multi-family buildings face expensive retrofits to their parking facilities to be EV ready. However, by making a proactive requirement to plan for and incorporate EV charging into future large building projects, the costs will be lower.



Providing increased access to EV charging at workplaces, commercial locations and multi-family buildings are all key priorities identified in the Companies' Electrification of Transportation Strategic Roadmap. These provisions related to EV charging will continue the tremendous progress that the state has made towards a cleaner and more sustainable transportation future.

Accordingly, the Hawaiian Electric Company support Bill 25 (2019), Proposed CD1. Thank you for this opportunity to testify.



Honolulu City Council
Committee on Zoning, Planning and Housing
530 S King St # 202
Honolulu, HI 96813
Thursday, July 25, 2019

**STATEMENT OF THE ILWU LOCAL 142 ON BILL 25– A BILL FOR AN ORDINANCE RELATING TO
THE ADOPTION OF THE STATE ENERGY CONSERVATION CODE.**

The ILWU Local 142 has strong concerns regarding Bill 25 which could negatively impact lower and moderate-income residents by eliminating natural gas water heaters and requiring the installation of solar hot water heaters.

First and foremost, the ILWU Local 142 strongly believes Hawaii and the rest of the nation needs to focus on addressing climate change. As our climate becomes warmer and our sea levels rise, a significant portion of the population will be at risk, species will become endangered and/or extinct and our economy will be in jeopardy. This is an urgent matter that needs serious attention.

That being said, natural gas for home water heaters is only a small component that has little impact on climate change in Hawaii. Hawaii's energy utilities are heavily dependent on fossil fuels which emit harmful CO₂'s into our environment and contributes to the warming of our planet. First, we need to focus on reducing our dependency on petroleum which generates the majority of our electricity throughout the state. Natural gas and solar water heaters do just that by reducing our dependency on petroleum fossil fuels. Unfortunately, on cloudy and rainy days, solar hot water heaters utilize electricity generated by our petroleum power plants to heat water – something natural gas heaters don't have to worry about.

In addition, many families on Oahu and across the state live on small to moderate incomes and may have a difficult time affording the added cost of installing solar hot water simply because of an electrical or plumbing renovation or even a larger renovation. Hawaii's cost of living is extremely high, and this will be an added burden to many working families.

Lastly, the state already requires all new homes to install and utilize solar hot water – a law that has been in effect since 2010. This seems like the logical approach and will have less of an impact on families struggling to make ends meet.

For the reasons mentioned above, the ILWU Local 142 urges the Council to defer or amend Bill 25. Thank you for the opportunity to testify.



SIERRA CLUB OF HAWAI'I O'AHU GROUP

HONOLULU CITY COUNCIL COMMITTEE ON ZONING, PLANNING, AND HOUSING

Thursday, July 25th at 9:00 AM

Support for Bill 25 (2019)- RELATING TO THE ADOPTION OF THE STATE ENERGY CONSERVATION CODE

Aloha Chair Menor and members of the Committee,

On behalf of the Sierra Club O'ahu Group and our 8,000 members and supporters, we are in support of Bill 25 (2019), which would update building codes to meet today's goals toward carbon neutrality and take climate change efforts seriously. The city is in a unique position to be a model for necessary immediate action across the state. The world's top scientists repeatedly say that humans must make massive shifts in their behavior to prevent the planet from warming more than 1.5 degrees by 2030.¹ Locally, University of Hawai'i climate scientist Camilo Mora shared, "studies at the University of Hawai'i suggests that unprecedented climatic changes will be common in the state by the 2030s."² The time to develop and implement strategies to make Hawai'i more resilient is fixed. Studies show that the longer climate action is put off, the more it will cost to adapt and mitigate. In this context, we support the intentions of Bill 25 (2019) and urge the council to adopt this bill.

We thank the City Council for enacting a solution-oriented policy that prioritizes the health and wellbeing of the environment and people of O'ahu. Bill 25 (2019) demonstrates a cost-effective equitable effort towards energy conservation with flexible options that reduce construction costs, make compliance easier, and provide long-term savings for residents.

There are two points to this bill that make a particularly balanced transition to a reduced carbon future. Beginning with the language in the bill for Electric Vehicle readiness-- EV-ready building codes are one of the most effective and low-cost strategies for local governments to encourage consumers to buy or lease electric vehicles in a growing market. These codes establish EV infrastructure requirements for new construction projects, including the electrical capacity and pre-wiring to make possible the future installation of EV charging stations which can save consumers thousands in installation costs. Studies have shown that installing EV-ready charging infrastructure is significantly less expensive during new construction than it is for retrofits. These cost savings are achieved through improved construction management and ultimately benefit builders and consumers.

It is in the spirit of working towards future EV adoption that we recommend an amendment in regards to EV charging levels. At this time, the 25% designation is too modest of a number when the trend of EV sales in the U.S and in Hawai'i are growing exponentially each year. It is within the interest of the city to fully commit to this measure and mandate 100% of parking stalls have EV-ready wiring. Approving a

¹ World Resources Institute <https://www.wri.org/blog/2018/10/8-things-you-need-know-about-ipcc-15-c-report>

²<https://www.civilbeat.org/2019/01/hawaii-2040-climate-change-is-already-here-and-were-running-out-of-time/>



SIERRA CLUB OF HAWAI'I O'AHU GROUP

progressive amendment will cut retrofit costs and save costs during construction because the price per parking space is reduced when done in bulk.³

The second part of the bill we'd like to highlight is the solar water heating (SWH), or other renewable energy source option. It is recognized that SWH is incredibly efficient and low cost for both home owners and developers. In a tropical climate zone, most of O'ahu can harness enough solar power to make it the most environmentally-friendly option for water heating. However, Bill 25 allows for flexibility in areas without enough solar resource. Studies by the Office of Resilience and DBEDT highlight the cost-effectiveness of this measure is to ensure that the residents living in the home are not locked into a water heater option that is not economically favorable. This is especially critical because although climate resiliency is a top priority for the well-being of our island and people, it should not be disproportionately burdensome on local families.

We'd like to also emphasize that we support this bill as intended for *newly-constructed buildings*, likely to be in place for 50 years or more, and don't believe Bill 25 will negatively impact residents or workers if passed. No jobs will be lost. In fact this should be seen as an opportunity to create more green jobs should companies like Hawai'i Gas evolve into providing renewable gas sources to reduce greenhouse gas emissions in our built environment and improve overall affordability for residents.

Sierra Club O'ahu Group has an invested interest in ensuring that our city and state stays committed to the goal of carbon neutrality by 2045. Bill 25 is critical first step to act in the context of climate change. We want to continue to work with other groups to move forward in creating an equitable transition to achieving the City's long-term climate resilience and sustainability goals. The O'ahu Group looks forward to supporting this bill by continuing to raise public awareness that the climate change crisis is one of the most immediate threats Hawai'i's future, especially affecting the dense population of businesses and residencies in Honolulu.

Mahalo for the opportunity to support Bill 25.

Respectfully,

Lauren Watanabe
Sierra Club O'ahu Program Manager

³ "Plug-In Electric Vehicle Infrastructure Cost-Effectiveness Report for San Francisco" and "Southern California Edison 'Charge Ready' Program Advisory Board Meeting #5 (August 2017) – Slide 11"